THE

MEDICAL AND SURGICAL REPORTER.

No. 1299.] PHILADELPHIA, JANUARY 21, 1882. [Vol. XLVI.—No. 3.

Original Department.

Lecture.

PERICARDITIS.

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Gentlemen :—This patient presents a disease which is not so frequently seen in the hospital as are many other affections, namely, pericarditis, or inflammation of the investing membrane of the heart. I will read the history and make some comments upon the case.

John —, twenty-five years of age, a steward, a native of Ireland, admitted into the hospital on the 23d of this month. The family history is unimportant. He had never been ill, as long as he could remember; never had syphilis; is not accustomed to hard drinking; usually has drank one or two glasses of beer a day, with his meals; sometimes port wine. Three days before his admission he had a pain in his right foot, near the heel, and soon after noticed that the ankle and the foot were swollen. The swelling increased, the parts became red and hot, and extremely painful, especially on motion. Two days later the knee began to be affected with slight pain. At that time he thought he had some fever.

On his admission he complained of swelling and tenderness in his foot and some pain in the knee. The swelling was confined to the tarsal region, which felt hot to the touch and was very tender. There was no swelling of the knee, and the pain seemed to be more in the tendon than in the joint. The pulse was 90, full and soft, and the temperature 99° F.

Auscultation of the heart gave no evidence of any disease there. I wish to call your attention to the fact that the history gives no evidence that he ever before had acute rheumatism, while it does show that at the present time he has an attack of subacute articular rheumatism, limited to a few joints.

He was placed upon the following treatment: The salicylic mixture, half an ounce, containing salicylic acid, twenty-two and a half grains, in solution, every three hours; the bicarbonate of soda, half a drachm every three hours; lead and opium wash applied to the knee. I wish, here, to impress upon you, when using salicylic acid or salicylate of soda, which is now the general treatment of rheumatism, that it is important also to use the alkalies in sufficient quantity to render the urine as speedily as possible alkaline, with a view to diminishing the liability to the cardiac affection. Two days after his admission the swelling and pain in the foot were much diminished.

Now, the question arises, whether that treatment may not have prevented the further development of the rheumatic affection. We could probably answer that in the affirmative. On the third day after admission there was scarcely any pain in the foot, and last night there was no murmur to be heard in the cardiac region.

Now, this case furnishes occasion for impressing certain practical points. We shall see in a moment that we have evidence of endocarditis, that evidence consisting in the development of an endocardial murmur which we know did not exist before. Endocardial murmurs found after previous attacks of rheumatism, and other causes, are very common, and we cannot decide positively that endocarditis developed during the progress of a given attack of rheumatism, unless we were able to exclude its presence before.

On the 24th it is stated, that last night no murmur was to be heard over the præcordial region, but this morning there is a double friction murmur heard, with the greatest intensity at the left edge of the sternum, at its junction with the fourth costal cartilage. The sound is close to the ear, and is increased in intensity when the patient leans forward. A full respiration also increases the intensity, and raises the pitch.

Of course, the remarks which I have made about endocarditis do not apply to these symptoms; but it is fair to assume that this affection was also present, since, as I believe, it always accompanies rheumatic pericarditis.

In the afternoon, it is further stated, the murmurs had increased somewhat in intensity. The heart's action was then somewhat labored, and the first sound was indistinct. The murmur then became perceptible over both sides of the sternum. The area of superficial cardiac dullness was increased, the murmur became less intense, and pain disappeared. On the 27th, it is noted that the murmur was much diminished in intensity, the heart's action was still labored, the first sound very indistinct, and the apex beat diffuse. The percussion area of dullness was thought to be increased on a line between the nipples. On the 28th the murmur was still further diminished, the area of cardiac dullness increased, extending now about an inch to the right of the sternum, and to just beyond the left nipple on the same level. On the 29th the double murmur had disappeared, and a systolic murmur had occurred at the apex, but it was not transmitted.

This last statement contains evidence of endocarditis, or inflammation of the endocardium, and, indeed, is positive proof thereof, the absence of such a murmur having been determined beforehand. This murmur is produced by a certain amount of exudation within the left ventricle of the heart, there being no insufficiency of the mitral valve. It would not be strictly proper, therefore, to call it a mitral regurgitant murmur. The terms mitral systolic murmur without regurgitation, or an intra-ventricular murmur, distinguish it from a mitral regurgitant. As the term implies, it is heard with the first sound, and is located at the mitral valve, but it does not denote insufficiency of that valve.

Here, then, we have a case of rheumatic peri- and endo-carditis, occurring a few days after the commencement of a rheumatic affection. The rheumatic affection not presenting symptoms of sufficient intensity to be called acute, affecting only one, or at most two joints, and apparently readily and directly controlled by salicylate of soda. It occurs here to still more strongly impress upon your minds the importance of giving alkalies. Had this patient taken at the outset alkalies in sufficient quantity to render the urine alkaline, I think it is fair to say that the probability is he would not have had these murmurs. I will not say positively that he would not have had them, for the opinion of Mr. Fuller (who wrote many years ago), that rheumatic pericarditis never occurred as long as the urine was kept alkaline, was too strongly stated; we may say, however, that the liability to pericarditis is much diminished as long as the urine is kept alkaline. And here is another point which renders this case very instructive, namely, that while the salicylate of soda controlled the rheumatic affection, it did not prevent the affection of the heart, and since that remedy, salicylate of soda, has come into use, and has led, as it often has done, to the disuse of alkalies, cardiac affections have become much more common than before. I know, from personal observation, that we meet now with cardiac affections in rheumatism more frequently than we did when the alkaline treatment was relied upon, and the object of chief importance in the treatment of rheumatism is prevention of the cardiac affection, although it is, of course, desirable, if possible, to cut short the affection of the joints. But there is no such important consideration pertaining to the joint affection as there is to cardiac complications. Therefore, while it is perfectly proper, and indeed very important, to control the rheumatic affection by these remedies, we should not discontinue the use of the alkalies which reduce the liability to an affection of the heart. These points are so well illustrated in this case that I hope they will be borne in mind.

The pericarditis in this case is devoid of any apparent symptoms of gravity. It is one of those diseases which vary very much in different cases, as regards pain and other distressing symptoms, and symptoms of gravity. This patient is in bed, but had he been allowed his own will, he would have walked up to the amphitheatre. It is not proper for a patient with some pericardial effusion to take considerable exercise. That is an important practical point. He should take rest. I have known of at least two instances of sudden death, arising, apparently, from imprudent exercise during the presence of pericardial effusion.

Pain is sometimes exceedingly severe, having all the characteristics of pleuritic pains, and hence, when physicians relied wholly upon symp-

toms in diagnosis, cases of pericarditis were sometimes confounded with pleurisy. The pain is lancinating, sharp, of course, situated within the præcordium, and is increased on inspiration. In other cases there is little if any pain at all; not sufficient to call attention to the existence of any inflammatory symptoms at the pericardium. That is true, also, of other serious inflammations, as, for instance, acute pleurisy. Cases differ also with respect to the amount of the effusion; sometimes it is slight and inappreciable, in which event we distinguish the case as one of dry pericarditis. In other cases the effusion is moderate in quantity, in others considerable. In proportion to the amount of the effusion we have other symptoms dependent upon the effects of this, first upon the heart, and then upon adjacent organs. Of course, in proportion to the amount of the effusion the heart is compressed. It labors under mechanical disadvantages, hence, frequency or smallness of the pulse: hence, disturbance of respiration. Then, pressure by the enlarged pericardial sac upon adjacent organs sometimes occasions inconvenience. It presses upon the lung, and diminishes somewhat the lung capacity; it may press upon the œsophagus and thus interfere with deglutition.

In the vast majority of instances in which we meet with pericarditis, it occurs in connection with one of three affections, namely: first and most frequently, rheumatism—rheumatic pericarditis; next, perhaps, chronic Bright's disease; next, in connection with either pleurisy or pneumonia, affecting the left side. It is in these three pathological connections that we most frequently meet with pericarditis. The instances in which it occurs otherwise, including, of course, traumatic cases, are very few. It is very apt to be overlooked in connection with pleurisy and pneumonia, because we diagnose the presence of those diseases and think we have enough to account for the symptoms, and perhaps, omit to examine with reference to pericarditis.

As to the physical signs, I need not, I suppose, dwell upon the friction murmur. That is evidence of pericarditis, and also of pleurisy in the first stage. It is not, however, always found, even in the first stages of pleurisy, whereas in pericarditis I think I am safe in saying it is always present before much effusion has taken place. The movements of the two serous surfaces upon each other are such as to give rise to a murmur if the conditions for it be present, namely, a fibrinous exudation.

In order to be able at once to recognize the murmur, we must bear its characters in mind. Let us repeat them. In the first place, the friction murmur is almost invariably double; that is, it accompanies the two sounds of the heart, although it has not a fixed and uniform relation to them. They are, so to speak, in discord with the sounds of the heart, but there are two for each revolution. They convey to the mind the idea of friction. This in itself should not be relied upon in the diagnosis, for endocardial murmurs sometimes have that character. They seem to come from a superficial situation, right under the ear, or under the surface. They are increased in intensity when pressure is made over the præcordia with the ear or stethoscope. They are not conducted beyond the præcordia much, if at all, and are frequently heard only within a certain portion of the præcordia. These are characteristics of the pericardial friction murmur, as contrasted with an endocardial murmur. Endocardial murmurs, in order to be confounded with a pericardial friction murmur, must be double, since the pericardial murmur is double, and the only instance in which this error can be committed holds with relation to the aortic direct and the aortic regurgitant murmurs. The diagnosis can be made in that case by paying attention to the qualities of the endocardial murmurs, the conduction of the aortic direct up into the great vessels, etc.

After the effusion has been poured out into the pericardial sac, as in this case at present, the murmur disappears, and if we see the case for the first time at this stage, we have to depend upon other signs for our diagnosis. Removal of the heart from contact with the thoracic wall, by the presence of fluid in its investing membrane, alters the first sound, diminishes its intensity, and divests it of its booming quality. It becomes valvular, in that respect being like the second sound, and frequently being more feeble. This change is a very striking one, and was illustrated in the following case. Some years ago, when again about to commence my visiting service in the wards of the hospital, and while passing through, one of the assistants said, regarding a certain patient, that it was a case of rheumatism, a light attack; but, as a matter of curiosity, more than anything else, I put the stethoscope over his heart, and at once recognized the fact that the first sound was like the second, being valvular in quality. A further examination proved the presence of pericarditis with effusion, which had entirely escaped attention, because there was no pain or other symptoms pointing to it.

If the apex beat be above the normal position it is a diagnostic point in favor of pericarditis

with effusion. Sometimes it can only be felt by requiring the patient to lean forward, so that the apex may come in contact with the thoracic parietes. In this patient, the apex beat is in the fourth intercostal space, instead of in the fifth, which is indicative of some of the effusion still remaining within the pericardium. The presence of the effusion is further determined by percussion and auscultation, the former showing an increased area of dullness, and the latter an increased area over which there is absence of respiratory murmur. Increased area of dullness in the præcordial region, caused by pericardial effusion, is diagnosed from that caused by enlargement of the heart in this manner. In the latter the increased area of dullness extends more downward and to the left, while in the former the area of dullness is increased laterally, nearly equally on the two sides, and upward, and the triangular form of the area of dullness, corresponding with the form of the pericardium, is evident on percussion and auscultation. The apex beat, instead of being lowered, as in enlargement of the heart, is higher up than normal, in effusion into the pericardium.

The treatment of pericarditis varies considerably according to the amount of the effusion and the intensity of the inflammation, as denoted by the general and local symptoms. I have already spoken of the importance of quiet, which is an essential point in the treatment. If the patient suffer from a considerable amount of effusion, it is proper to treat it as we would effusion into the pleura, viz: we may give hydragogues; but always remember that this must not be carried to the extent of producing any considerable general debility. We may give diuretics. Sometimes blisters over the præcordia have a beneficial effect. I do not know that we can explain how it is done, but facts show that vesication of the skin lying over serous membranes aids in producing absorption of the contained effusion. I suppose a certain amount of benefit pertains to the application of the tincture of iodine externally. The patient, of course, is to be sustained by measures which do not excite the action of the heart, but which improve the constitutional power. If pain be a prominent symptom, of course that is to be relieved by the judicious use of opium in some form. We should continue the use of alkalies, and in that way, perhaps, keep the inflammation from increasing. A less quantity of the alkalies will be required to continue the urine alkaline than was required to produce alkalinity in the first place. These are the more salient points in the treatment of this affection.

Rheumatic pericarditis gives us a good ratio of recoveries. The prognosis, if there be no untoward circumstances, is favorable. Renal pericarditis, if we may so distinguish it, is quite otherwise. A very large majority of these cases prove fatal. Pericarditis occurring in connection with pleurisy and pneumonia, increases very much the gravity of those affections, and proves fatal in a considerable proportion of cases, although its presence does not warrant us in forming a fatal prognosis.

In the present case it is only important to keep the urine alkaline, and to prevent the patient from making those exertions which he seems inclined to do because he feels pretty well and has no local symptoms.

Asthma, Emphysema, Bronchitis.

The hospital record of the next case, gentlemen, is asthma, emphysema, and bronchitis, three affections which, as we have seen, are apt to be associated. The patient is a boy, thirteen years of age, a native of New York, who entered the hospital on the 28th of this month. His father had been subject to attacks of dyspnœa, coming on at night, for nearly twenty-eight years, and from that statement we may infer that his father suffered from asthma. This is one of the diseases into which heredity frequently enters as a cause. No other member of the family has been affected, although he has several brothers and sisters. Here we see an illustration of what we often see, that where heredity does enter into the causation of the disease, it may affect only one of a numerous family, the others escaping.

The personal history of the patient states that for more than seven years he has been subjected to attacks of difficult breathing. Here is an interesting point; that while asthma does commence early in life, especially in the inherited form, it is not common for it to commence as early as in this case. This boy was only six years of age when he began to have attacks of difficult breathing.

The attacks came on in the night, and generally lasted a part or all of the next day. At first they came on once a month, and he was sometimes free from them during three or four months. Two years ago he went to Kansas to live, and was there free from his trouble during several months. That part of our country, and more particularly Colorado, has been considered favorable to these affections. About eight months ago he returned to New York, and since then he has had an attack nearly every week. It is interesting to note this statement in connection with what was just previously stated.

He has had a cough as long as he can remember, and has had difficult breathing on very slight exertion.

Physical Examination.—On inspection, there is to be noticed a well marked deformity of the chest, the upper anterior portion bulging forward, the lower portion being retracted, particularly below the sternum. On inspiration the sternum rises vertically. The impulse of the heart is seen and felt in the epigastric region. On percussion in the infra-clavicular region the note is vesiculo-tympanitic. On auscultation over the upper part of the chest, most markedly in front, the inspiratory sound is weakened and short, the expiratory sound is prolonged and low pitched. There are a few mucous râles over the chest, varying in position, and also sonorous râles.

The patient was placed upon tonics and an emulsion of cod-liver oil, and should dyspnœa come on, he is given the fluid extract of quebracho, fifteen minims every hour, this being a new remedy, supposed to have a good influence upon dyspnœa occurring under different circumstances.

When we look at the boy's chest, we see that it has not exactly the deformity of emphysema, the barrel-shaped appearance which we have seen in other cases. This patient's breast looks more like what is commonly known as "chicken breast." The pulsation of the heart is seen in the epigastric region, as stated in the history. This might be due to emphysema affecting the left upper lobe, but on examination I find enlargement of the heart, principally of the right ventricle, with a loud pulmonary second sound, and this probably is the chief cause of the descent of the apex beat. I also hear sonorous râles, which are likely to be heard in cases of asthma, even at times when the patient is free from an attack. As the patient breathes deeply, we see the characteristic movements of emphysema; there is elevation of the whole chest, with some retraction of the lower part of the chest on inspiration. Vesiculo-tympanitic resonance is heard over both upper lobes, greater in degree, however, over the left than over the right lobe, which is the rule, with very few exceptions.

Since there is no valvular lesion present it is fair to attribute the enlargement of the right side of the heart to the presence of emphysema.

We have not time to consider the treatment of this case to-day.

—The Danish Society for the Protection of Animals offers two prizes for the best essays on Vivisection. The question to be treated is the replacing, for medical experiments, of living animals by those freshly killed.

COMMUNICATIONS.

SOME POINTS IN REGARD TO TROPHIC NERVE CELLS.

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Written for the MEDICAL AND SURGICAL REPORTER.

(*Continued from page 35.*)

The third case reported on page 443, of the Surgical History of the War of the Rebellion, reads in substance as follows: Private W. S. L., 32 years of age, was wounded December 10th, 1864, by a conoidal ball, which entered the back on the left side, about three inches below the inferior angle of the scapula, fractured the eleventh and twelfth ribs, passed directly across the back, between the last dorsal and the first lumbar vertebræ, both of which it fractured, as also the eleventh and twelfth ribs on the right side, and lodged under the skin at a point almost corresponding to that of its entrance on the opposite side. The lower extremities were instantly paralyzed. The ball was readily extracted. There was slight hemorrhage, and considerable shock, with pain in the right lung. The urine was drawn off by the catheter, and the patient had an involuntary evacuation from the bowels. The bladder had to be emptied by the catheter, and the bowels evacuated themselves. There was some pleuro-pneumonia. About ten or twelve days before his death the tissues over the right trochanter, and for a short distance down the thigh, began to slough away. The sloughing continued until the trochanter was exposed, and commenced over the sacrum and left trochanter, although he did not suffer the least pain. At the autopsy it was found that the ball had passed directly through the cord, cutting it off.

Attention may now be drawn to some significant points in regard to this case:—

(1) There was no direct injury to the ganglia of the sympathetic. The disturbance to the sympathetic nerve cells must have been by the way of indirect irritation. The coördination and the correlation between certain spinal cells and certain sympathetic cells must have been completely destroyed. There may have been some spinal cells, that in their mutilated condition were still connected with the cells of the sympathetic, yet their influence on the cells of the lumbar ganglia would be in the line of irritation—in the nature of in-coördinate cell action.

(2) The lumbar enlargement of the cord was

severed, or cut off entirely, so as to cause complete paralysis of sensation and motion below the seat of the injury, and yet the involuntary motion to some extent still continued. At the same time it must be admitted that the cells of the severed end or part of the cord had some motor properties still left for a few days, so that there would be, to some extent, a coördination of spinal and ganglionic functions.

(3) The lumbar enlargement of the cord is said to be a trophic centre, that is, it is said that there are trophic cells in the anterior horns of gray matter, and that this is so we may admit, only we think it prudent to add that part of the trophic work is probably done by the cells of the lumbar ganglia, for it would be quite as competent to say that an injury to the spinal cells would irritate the co-related cells of the sympathetic ganglia, as it would be to say that an injury to the cells of the sympathetic ganglia would irritate the co-related cells of the spinal cord, and this would be more especially so in the present case, if it were not so in some other case, because of the nearness of the track of the ball to the tissues about the special elements of the sympathetic.

The necrosis of the tissues of certain parts of the body below the seat of the injury was caused by the injury in both of the above cases: (1) In the first case the injury was done to the lower sympathetic ganglion of the neck, and the implication of the cilio-spinal axis was no doubt indirect. (2) In the second case the injury was done to the lumbar enlargement of the cord, and the implication of the ganglia of the lumbar sympathetic was probably indirect. It is true, that we have no direct observation, as a matter of fact, in regard to the autopsy going to show that the cells of the lumbar sympathetic had suffered on account of the injury to cells of the cord, and yet it is highly probable that these cells did suffer, and that they had an influence in causing the necrosis of the sloughing tissues.

It is true, indeed, that nutritive activities take place in some organic forms in which there are no nerves; plants and some of the protozoa, have no nerves, and yet they develop and grow. *Nor do plants and certain protozoa have livers and kidneys;* but if they had such organs differentiated for them, why they certainly could not get along without these organs, and yet these organs are, in fact, made up of cells that have special and peculiar functions; and so are spinal cords and sympathetic ganglia made up of cells, which we call nerve cells. To be sure these cells have special processes, which we call nerves, but these processes are parts of the cells. To say that a protozoa, or a plant, can be nourished without nerves, has no weight in showing that the nerves of a highly organized being can be nourished without the intervention of nerve cells. To say that there are no nerve cells in the early life of the embryo, does not disprove any connection that exists between the adult nerve cells and the nutrition of certain other cells of the human body. Why, it ought rather to be said that a nerve cell is a special cell, doing special work, just as we know that a liver cell is a special cell doing special work. In fact, we know that in the nerve cell itself the most active nutritional changes are taking place, and that, in so far as nutrition is concerned, a nerve cell is very much like any other cell; in fact, the analogy, in this respect, of a nerve cell to a liver cell, to the cell of a protozoa, or to the cell of a plant, is very remarkable.

In this place it may be noted that the ganglion of the posterior spinal nerve root is a mass of cells, sending fibres to the cord and to various parts of the body; and that apparatus of the cell and its fibres has the functions of nutrition and conductivity; that is, a special cell carries on its nutrition much in the same way as any other cell, and has at the same time the power of conducting impressions. And this view leads us to a clearer conception of the functional powers and relations of the masses of nerve cells found in front of the cord: (1) The spinal cells have *white* roots, or fibres, which are distributed to various parts; some to the sympathetic ganglia; (2) the cells of the ganglia have *gray roots*, or fibres, which are distributed to the spinal cord in part. Hence, there are certain spinal cells and certain ganglionic cells that are intimately consociated in so far as their structure is concerned, and very probably have similar and consociated functions. Two things we surely know: (1) That some of the spinal cells are promoters of motion in the voluntary muscles; (2) that some of the ganglionic cells are promoters of motion in the involuntary muscles. We also surely know that injuries to some of the spinal cells and some of the ganglionic cells disturb the nutrition of some of the cells in certain parts of the body. And the cases above cited show that this is so, and aid us in comprehending the functions of the spinal nerve cells and the sympathetic nerve cells. And the outcome of this view is, that there are certain nerve cells in the spinal cord and certain nerve cells in the sympathetic ganglia that are promoters of the movements of nutrition.

In a given case, if we suppose a motor nerve cell to be paralyzed, the muscle cells to which

its axis cylinder goes will also be paralyzed. And if in a given case it is found that certain cells that are not muscle cells are necrosed or degenerated, it must follow, according to the view we have advanced, that certain nerve cells are irritated, inflamed and destroyed, and these nerve cells are called *trophic*, because they have a special influence on the processes of nutrition.

In this place let me say that two views in regard to *trophic* nerve cells have been brought forward: (1) It is supposed by some that the *trophic* nerve cells exist in the spinal cord, notably in the medulla oblongata, the cilio-spinal axis, and the genito-urinary enlargement. (2) It is supposed by others that the *trophic* nerve cells exist in the sympathetic ganglia. Let me add, that each of these views is correct, to some extent, and that one does not exclude the other, for the truth includes, as it were, both views; that is, the *trophic* nerve cells exist in both the spinal cord and the sympathetic ganglia. And the two sets of cells, *in* and *in front of* the cord, are *co-related* in their structure, and *coördinated* in their trophic functions, as well as the motor nerve cells of the cord and the ganglia are *co-related* in their structure and *coördinated* in their special functions.

It is possible to support this view by a consideration of the *semilunar ganglia*. Which is the most important, the special function of the liver, its simple function of nutrition, or the motor function of the fibres of its blood vessels? Any part of the mechanism of the liver is important no doubt, but why should a considerable part of the semilunar ganglia and the hepatic plexus be set apart for the hepatic blood vessels only? It seems to me that the blood vessels of the liver, as compared with other organs of the body, ought not to need the cells of a very considerable part of the semilunar ganglia, and the extensive hepatic plexus, for the contractile work that they are called upon to perform. But it seems to me rather, that some of the cells of the semilunar ganglia are especially engaged in aiding the liver cells to carry out their special functions. In other words, there are ganglion cells that have special trophic functions. Of course, the influence of other parts of the nervous system on the functions of the liver, are not to be overlooked. In this connection, it may be mentioned that the disturbing influence of diseased renal ganglia on the function of the kidney has recently been pointed out by Da Costa and Longstreth; and the meaning of this disturbance is, that the renal ganglia contain *trophic* nerve cells. But these trophic cells are not in the spinal cord, nor in the pre-vertebral ganglia of the sympathetic; they are in abdominal ganglia differentiated from the pre-vertebral ganglia; and if these nerve cells are *trophic*, as they no doubt are, why should not some of the cells of the pre-vertebral ganglia be also *trophic*?

By the term *trophic*, it is not intended to convey the idea that the visceral ganglion cells are the sole agents in the conduct of nutrition. The meaning of the facts is this: the nerve cells of the visceral ganglia, and the special cells that are acting on, and absorbing, and transmitting into the blood vessels the elements of food, are differentiated and are co-related, and they are coördinated in the work of the primary steps of nutrition. There is, as it were, a kind of cell co-partnership for the attainment of a special object; each co-partner performs his own work, and the entire work could not be performed by the ganglion cell, or by the liver cell. In this sense, a ganglion cell is a *trophic* cell, and a liver cell is also a *trophic* cell. And it would be proper to note, that the renal cells are concerned in part of the work of the last steps of nutrition, and that these cells are coördinated with the cells of the renal ganglia; and if nerve cells are associated in the first steps and the last steps of the processes of nutrition, then the question arises: Are not nerve cells associated with the intermediate steps of the processes of nutrition? that is to say, are not those intimate changes that occur in the general structure of the various cells of the body associated with the nerve cells? My reasoning tends toward this conclusion. In fact, there is a point of evidence that appears to have great weight in determining the question, and that point relates to the cornea.

If we admit that the cornea has no vessels, the capillaries terminating in loops at its circumference, and that it is composed of anastomosing fusiform cells, between which are tubular interstices, and that it is abundantly supplied with nerves, coming probably from the *lenticular ganglion*—we may then, in the most reasonable manner, say, that there is no need of motor nerves to act on the muscular fibres of a blood vessel in the cornea, because there is no such blood vessel. But in all reasonable probability we may say that the nerves which enter the cornea are in some way co-related to corneal fusiform cells. And it is quite a remarkable fact that the blood vessels which surround the cornea, that is, their muscular fibres, are supplied with nerves from the same source as the cornea itself—as we have said—the lenticular ganglion. Now, I think it can be understood, that, as the vascular loops

around the cornea supply the nutrient material in connection with their special nerves, the coördinated nerves going to the fusiform cells of the cornea carry from the cells of the lenticular ganglion an influence having much to do with the functions of the cornea, and therefore, with its nutrition, in other words, the fusiform cells of the cornea have nerves that come from *trophic* nerve cells.

A special function of the cornea is the transmission of light and the nutrition of the corneal cells, and hence their molecular construction must be such as to keep up this special function. But as a matter of fact, some animals that for some generations have been without light are destitute of the special corneal structure, showing that special function, or use, in some way modifies the nutrition, and no doubt also modifies the nerve supply, as we may see by comparing the corneal nerves with other superficial and special nerves. And so in whatever reasonable way we look at the corneal nerves—with their cells—and the fusiform corneal cells, we are drawn to the conclusion that there is a coördination of work in the field of nutrition, between special cells.

The corneal cells were differentiated to let the waves of light pass through them, and some of the cells of the lenticular ganglion were differentiated to aid the corneal cells in keeping up a molecular structure that will not impede the light waves as they pass to the retina. Well, the cornea is a kind of connective tissue, which is, in a general way, part of the connective tissue of the body, and it has been found that nerve fibres go to or near the cells of the connective tissue, and as the connective tissue, as it were, performs *frame work*, its function being mechanical, somewhat different from the function of the cornea, where there is molecular mechanism, and as the cells of the connective tissue have not the special mobility of muscle cells, having no need of special motor nerve fibres, it is very reasonable to suppose that the nerve fibres going to these cells coöperate in the work of nutrition, and that the nerve cells from which these fibres come are *trophic*.

(To be Continued.)

TEMPORARY GLYCOSURIA, PRODUCED APPARENTLY BY ENFORCED SEXUAL CONTINENCE.

Paper read before the Medical Society of D. C.,

BY H. C. YARROW, M.D.,
Of Washington, D. C.

I desire to call the attention of the Society to the history of a case which, in my opinion, is interesting and somewhat curious. A short time since I was consulted by a male patient, a little over middle age, who complained of a constant desire to urinate; he had pain in the back part of the head, in the lumbar region, and feared that his kidneys were affected. These symptoms had developed within a few days anterior to his visit to me. I requested and obtained a specimen of morning urine, which was of high specific gravity, and which, upon being tested with Fehling's solution recently prepared, showed undoubted presence of sugar. To corroborate my own examination, a sample of the same urine was submitted to Dr. Mew, the chemist of the Army Medical Museum, whose analysis produced similar results. The patient was put upon ammonia bromide combined with fluid extract of jaborandi, and counter-irritating applications were made to the nuchæ and lumbar regions. This treatment was persisted in for nearly a week, the urine being tested for sugar every day; in eight days it had entirely disappeared, and up to the present time is still absent. To get at the history of the case, the patient was subjected to a rigid examination, and was finally induced to make a clean breast of the whole affair, which seemed to me to account for the symptoms related.

A few months since he contracted a friendship for a lady, which gradually increased to something warmer, and finally certain liberties were permitted and taken; but having been placed upon his honor not to go too far, my patient was kept in a state of constant erythism, without being able to gratify the necessities of his ardent nature. In the fullness of his confidence, he informed me that he had endeavored, upon several occasions, to cool his passion with other women, but was unable to succeed. His condition, as evidenced by the urinary trouble, became at length alarming, and induced him to seek professional assistance. It is my firm belief that the history, as related, will account for the sugar in his urine, for we are told by a number of writers that temporary glycosuria may be produced by a number of causes. For instance, T. Lauder Brunton, in Reynolds' System of Medicine, says that sugar in the urine is produced sometimes by violent and depressing emotions; some cases seem to arise from severe bodily exertion and sexual excesses. Roberts states that violent mental emotions may produce it, and this opinion is shared by Bartholow and others. Per contra, in discussing the case, it should not be forgotten that, according to Lionel Beale, occasionally de-

cided traces of sugar may be detected in the urine of persons who are not suffering from any particular symptom. It may be excreted for days, or even for a few weeks at a time, in small proportions. It occasionally happens that after abstinence from food for some hours, a meal consisting entirely of starchy matters will cause sugar to appear in the urine, and if a healthy person under these circumstances takes a quantity of cane sugar, a temporary diabetic condition will almost certainly be induced. We should also remember that the inhalation of chloroform has produced temporary glycosuria, and injuries to the brain have sometimes a like effect. It is not necessary to repeat here the many experiments which have been made upon animals to prove this fact. I should not omit to state that toward the close of my patient's attack nature relieved the distended seminal vesicles, and the next day no sugar was found in the urine. An examination was this day made (March 24th) of the urine of the patient spoken of, and not a trace of sugar discovered.

I submit this case to the Society, trusting that from the large experience of my professional brethren some additional light may be thrown upon the subject of temporary glycosuria, and if my conclusions are erroneous I may be set aright.

Hospital Reports.

WEST PENNSYLVANIA HOSPITAL, PITTSBURGH, PA.

Reported for the Medical and Surgical Reporter, by T. L. Hazzard, M.D., Resident Physician.

There have been, during the last seven years, nine cases of

Abscess of the Liver

in this hospital. This is such an unusual number for this latitude that a brief history of them may be interesting to the general reader, or prove useful to those interested in statistics:—

Case 1.—John R., aged thirty-six, born in Pennsylvania; married; temperate; admitted April 3d, 1874. Has had frequent attacks of intermittent fever; was confined several months in prison during the Rebellion; history previous to the war good; has not been in good health since.

Symptoms: Headache; diarrhœa; tenderness in right iliac fossa; emaciated; no appetite; temperature 102°; was supposed to have typhoid fever. Condition remained the same until the 9th, when he had a rigor, followed by a rise in temperature, 104°. Began to show signs of peritonitis over the right side, extending from the iliac fossa to the border of the ribs, with the accompanying symptoms. Four days after peritonitis had disappeared, under treatment. Upon the 16th he sat up and seemed to be recovering. Had profuse night sweats, but no pain until the 20th, when the pain grew intense, and vomiting began, and diarrhœa returned. Patient grew weaker every day, until June 7th, when he died. Treatment supportive, with blisters and absorbents.

Autopsy.—Liver completely filled with small abscesses, except in lobus spigelia. Evidences of caseous degeneration and absorption showed some of the abscesses to be of long standing. Bowels showed numerous ulcerations from long standing dysenteric diarrhœa. Other organs normal.

Case 2.—Thomas McK., aged thirty-two; Ireland; puddler. Admitted July 16th, 1874. History not clear; suffering acute pain in right hypochondriac region; liver dullness extended from four inches below the ribs upward to the third rib, and from the median line in front to the same line at back. Had been suffering for three weeks before admission.

July 18th. Suffered great pain; dyspnœa; tumor increasing upward.

July 19th. Died.

Autopsy.—Right lobe of liver was one huge abscess. The pus had perforated the diaphragm, and the right pleural cavity was filled with thick, fetid pus. The lung was compressed and the heart pushed to the left.

From the nature of his vocation, that of iron puddler, the abscess was probably of traumatic origin, as no other cause is assigned.

Case 3.—Charles M., aged thirty-four; Englishman; puddler; man of good habits and good health. Admitted Nov. 19th, 1875. Eleven weeks before began to have pains in region of liver, shooting into his right shoulder. At the same time he had rigors, followed by profuse perspiration. These symptoms occurred at irregular intervals, the pain finally becoming so severe that he sought relief in the Homœopathic hospital. Remained there for eight weeks, when he was admitted to this hospital. Could rest in bed only in sitting posture; breathed with great difficulty; emaciated and slightly jaundiced; abdomen greatly distended; bowels constipated; fullness of right side until the intercostal spaces were obliterated; severe pain over liver; dullness increased. The seat of the most severe pain was under the sternum.

Diagnosis of abscess made and exploring needle introduced. A few drops of blood flowed out, but no pus.

December 13th. Has had a month of comparative ease. Has taken stimulants, with morphia, to relieve pain. To day suffers great pain over liver. Pain extends over abdomen, and general peritonitis sets in.

December 17th. Condition grew steadily worse. Died.

Autopsy.—Peritoneum greatly inflamed. Cavity filled with sero-purulent fluid, and flakes of lymph. Strongly adherent in the median line. A large abscess was found in the upper and posterior part of the right lobe. It was filled with a yellow, thick pus. The right suprarenal capsule was destroyed, and the kidney formed a part of the abscess wall. Other viscera apparently normal.

Case 4.—Richard H., aged 40; born in England; laborer in rolling mill; intemperate. Admitted December 22d, 1875. Has history of bad health, with pain in bowels, diarrhœa and headache. Was treated for inflammation of bowels. Has thin, clay-colored stools; several daily. They are exceedingly offensive, and sometimes contain blood.

January 11th. Had œdema of right leg and thigh, and left leg to the knee. Right abdominal and thoracic parietes as high as nipple. Hepatic dullness increasing upward; is as high as the nipple, and extends downward into the iliac fossa. Urine voided in small quantities, and deposits lithates; contains albumen. Patient lies with head and shoulders elevated, and knees drawn up. Pulse thin and wiry. Extremities cold and clammy. Suffers no pain.

Jan. 20. Had delirium. Temp. 103. Died the next day.

Autopsy.—Abdominal cavity contained four and one-half quarts of sero-purulent fluid. Colon contracted, and filled with dysenteric ulcerations. The liver contained two cavities, the smaller one having evacuated its contents into the colon. There was a deposit of tubercle in the apex of the left lung. The left pleural cavity contained about six ounces of serum. The right pleural cavity contained about eight ounces of fluid, and there were adhesions in both. There were blood clots in the pericardium.

Case 5.—Francisco B., an Italian, aged thirty-five; single; spoke but little English. Had been having pains at irregular intervals, in hepatic region, for three months. Examination showed bulging of the ribs in the left hypochondriac region, and a fullness in the epigastrium, where the most severe pain was. The dullness was normal on the right side, but extended below the ribs for some distance on the left. The impulse of the heart was communicated through the abscess, and could be felt and seen below the ribs on the left side. He had profuse sweats. Continued about the same until December 30th, when he was attacked by severe pain, diarrhœa and vomiting. He gradually grew worse until his death, January 3d. The highest temperature reached was 102°.

Post-mortem showed a large abscess in the left lobe, which had destroyed the entire lobe. Right lobe apparently normal. The heart and left lung were pushed above the third rib by the arching of the diaphragm.. All other viscera normal.

Case 6.—Chas. McI., Canadian, aged twenty; teamster; temperate. In May, 1880, was drawing logs from the river, when he fell upon the end of one, striking upon his right side; was obliged to go to bed for a week; resumed work again, but was obliged, by pain in hepatic region, to leave off hard work. Had pain in right shoulder and side. Has never been in a warm climate, never had dysentery, or suppurating wound. Admitted to hospital in November, 1881. At this time there was pain in side and shoulder, cough, abdomen somewhat distended, and liver dullness extending high into right chest cavity. Diagnosis of pneumonia made, but soon changed for abscess of liver. Continued, sometimes better, sometimes worse, until January 2d. At this time the dullness extended from the right nipple well down into the inguinal region, and over as far as the umbilicus. Deep fluctuation detected near the ensiform cartilage. An aspirating needle was introduced by Dr. W. J. Asdall, four inches below the nipple, in the mammary line, drawing off sixty-four ounces of purulent, sanguineous fluid. Patient experienced great relief of all the symptoms. A flexible catheter was introduced and retained in place. The cavity was washed daily with carbolized water, 1 to 40, and the patient given tonics and nourishing diet. Improved rapidly and steadily until April 1st, when he had severe diarrhœa, and his health began to break down rapidly; appetite became poor until, from exhaustion, he died, May 28th.

Post-mortem showed three-fourths of the right lobe occupied by the cavity. The pus had perforated the diaphragm and broken into the pleural cavity, where a sack had been formed by pleuritic adhesions. The right kidney was adherent to liver; lungs and heart normal, except right lung, which was very much contracted by pressure.

Case 7.—James C., born in Louisville, Ky.; aged nineteen; river man. Has lived all of his life in Louisville. Has been further south for months at a time. From time to time he has noticed little swellings over his liver, which would make him a little sick, but, when painted with iodine, disappeared in a few days or a week. Entered the hospital with the usual symptoms, May 28th, 1881. The dullness extended from the third right rib to below the lower border of the last, and on the left was continuous with the spleen dullness.

June 2d. Fluctuation being detected, the tumor was tapped by aspiration, between the seventh and eighth ribs posteriorly, and twenty ounces of sanguineous pus removed. The abscess was not entirely emptied, and a drainage tube introduced allowed of the slow evacuation of pus as it accumulated. A local peritonitis followed, but was easily controlled, and great relief experienced. Five days afterward there were all of the symptoms of collapse. The pulse became feeble; temperature, 95; skin cold and clammy. Active stimulation restored him. In a few days afterward all bad symptoms had disappeared. Decided to make an opening lower down, which was done by free incision with the knife; evacuated about two pints of yellow pus; a curved trocar and canula were introduced, and nearly two quarts more flowed out. Emaciation was rapid from this time, but the relief was great. He was seized with secondary pneumonia, and died June 22d, having been in the hospital not quite one month.

Post-mortem showed the right lobe entirely taken up by a large cavity; there were numerous cicatrices in liver, which had doubtless been small cavities; the other viscera apparently normal.

Case 8.—C. P., aged 47; temperate; born in Pennsylvania; had never been in the south; never had dysentery or suppurating wound. When brought to the hospital was suffering with great pain in hepatic region; slight jaundice. He was so bent over, that it was impossible for him to as-

sume the upright position; liver dullness extensive; dyspnœa. Diagnosed pneumonia; afterward the abscess pointed in the back on the right side. Diagnosis changed to lumbar abscess; then again to abscess of liver; was opened by bistoury, and sanguineous pus to the amount of two pints discharged. Debris of liver tissue found in pus. (Notes are here wanting until three weeks afterward, when patient was discharged cured.)

Case 9.—L. M., aged 46; intemperate; iron puddler. Three weeks before entering hospital he began to feel bad; vomited, and had severe pain in right side; has had vomiting spells once daily, at least, ever since, and has had chronic diarrhœa. Entered hospital June 1. Upon examination, a tumor the size of a cocoanut was seen upon the left side. There was fluctuation. Tumor very painful, as, indeed, was the entire abdomen. Dyspnœa, continuous vomiting and purging.

June 2d. Patient died. The liver was found to contain six cavities, from the size of a cocoanut to the size of a walnut. The large cavity mentioned above had bursted during the night, and pus was in abdominal cavity. The pus in the several cavities was green, or yellow, or reddish yellow. Extensive peritonitis; ulceration of bowels and stomach. Other viscera normal.

The treatment in all of these cases was supportive, and the various symptoms were treated as they would arise. It will be seen that the causes can reasonably be traced to ulceration of bowels in these cases. Traumatic causes in two; living in tropics (?) two; no cause, two. Two only were multiple, the rest being single abscesses.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF WILLIAM GOODELL, M.D.,

Professor of Clinical Gynecology in the University of Pennsylvania.

Reported by Wm. H. Morrison, M.D.

On Monday, Nov. 14th, 1881, Dr. William Goodell performed

Double Ovariotomy,

at the Hospital of the University of Pennsylvania. The operation was performed in a private room of the hospital, in the presence of one section of the graduating class of the medical department of the University. Previous to the admission of the class, the atmosphere of the room was saturated with a spray of carbolized water, the patient etherized, placed on the operating table, and a piece of rubber cloth, about one yard square, having at its centre an oblong hole eight inches in its longest diameter, was secured to the abdomen by means of lead plaster spread around the circumference of the opening. The object of this was to protect the clothing of the patient from the discharges. This it did perfectly.

Dr. Goodell was assisted by Drs. B. F. Baer, W. L. Taylor and Palmer. Ether was used as an anæsthetic, and the antiseptic method was adopted in all its details, the operator and his assistants carefully washing their hands in carbolized water previous to the operation, and also several times during its performance, the sponges being thoroughly and frequently washed in a carbolized solution, the instruments being kept in a 2.5 per cent. solution of carbolic acid, and a spray of the same strength, from a powerful steam atomizer, being kept directed on the parts during the operation and the dressing of the wound.

The Doctor premised the operation with the following remarks: "Mrs. J. S. C., aged thirty-six years; married; two children, aged respectively, fifteen years and eleven years. The catamenia are regular and free, accompanied by bearing down pains. She came to consult me on October 7th, 1880, on account of various uterine symptoms, and a tumor, which she had discovered only six months previously.

"The womb measured 3.5 inches, and lay to the left, and so high up that the tip of the sound could be felt in the left groin. To the right of the womb and posterior to it was an elastic tumor as large the fœtal head, conveying the sensation of fluid. It seemed very closely adherent to the womb, and every motion communicated to it affected also the womb.

"The diagnosis which I made at that time was cystic degeneration of the right ovary, but the tumor formed so slowly that after a year it had hardly reached the navel, and I was disposed, therefore, to consider it a cyst of the broad ligament. It gave her, however, far more pain and uneasiness than is usually produced by either ovarian or parovarian cysts.

"On Oct. 5th, 1881, I tried to empty the cyst by an aspirator, but succeeded in removing only half a pint of thick, stringy, colloid fluid. The diagnosis was, therefore, narrowed down to colloid multilocular cyst of the right ovary.

"I shall now proceed with the operation, and I hope that no one will speak to me or ask me any questions during the operation, nor shall I talk much, as one needs all his wits about him in performing this operation."

The abdomen having been washed with the carbolized solution, an incision, beginning one inch below the umbilicus and extending downward four inches, was made. The skin, superficial fascia and muscles were carefully cut through. The transversalis fascia then appeared. This was cut on the director, and the peritoneum exposed. All bleeding vessels were now secured by pressure-forceps, having a catch. The peritoneum was hooked up with a tenaculum and divided. The cyst then appeared, the doctor remarking that "whenever you see this blue colored cyst, it is almost invariably a cyst of the ovary. In my operations, when this blue color was present, it has always been a cyst of the ovary. As I have said, my diagnosis is that this is a cyst of the right ovary, but it may be of the left, for I have been caught on that point."

Wells' trocar was then introduced, but only a small quantity of thick, yellowish fluid escaped. By a little manipulation, enough fluid was removed to allow of the opening into the cyst to be drawn through the wound in the abdomen. It was then enlarged and the hand passed into the cyst, breaking up some of the smaller ones. After

this, the tumor was drawn out as far as possible, and each cyst punctured as it appeared. This allowed the tumor to be drawn through the abdominal incision. Two flat sponges were then passed in on each side of the abdomen, to prevent the air and discharge from reaching the peritoneum. The pedicle was then secured temporarily by Dawson's clamp and the tumor removed. A needle, armed with a double thread, was passed through the pedicle, and the pedicle tied in two sections, the Doctor remarking, "for tying this, I use the finest silk thread (carbolized) compatible with strength.

"This case has been a very easy operation. There were very few adhesions. Last Saturday I performed this operation thirty miles on the other side of Pittsburg, and removed a solid tumor of the ovary, which is a very rare form of growth. I am going to return this pedicle to the abdominal cavity. You might ask, 'Will not the distal end slough?' No, it will not. This ligature has cut deeply into the stump. The thread has entirely disappeared, and the parts on each side of the ligature are in contact. Plasma will at once be thrown out, and within twenty-four hours blood vessels will pass from one side to the other. The remains of the pedicle will also contract adhesions to the surrounding parts and in this manner receive nourishment.

"The case that I operated on a week ago to-day, from which we removed both ovaries and two fibroid tumors, is doing very well. I shall now examine the other ovary (the left)." This ovary was also found to be diseased, and was removed, with the fimbriated portion of the Fallopian tube. A sponge was then placed in Douglass' pouch, to see if there was any oozing of blood. The doctor had the sponges carefully counted several times, to make sure that they were all accounted for. "It is very important," he remarked, "to count the sponges, for almost every ovariotomist has left sponges in the abdomen." Two sponges were left in the abdomen while the external stitches were being passed. These consisted of carbolized silk threads, armed with a needle at each end; they were passed from within outward, and included all the tissues. "I include the peritoneum because it unites with great quickness; it will have united in twenty-four hours; so that if there is any pus formed in the upper layers of the wound, it cannot get into the peritoneal cavity." The external stitches having been passed, the sponges left in the cavity were removed, and found to contain no blood. The sponges and the dressing forceps were again counted, and the number having been found to be correct, the external incision was closed.

"Spencer Wells performed an ovariotomy one afternoon (his usual time for operating), and in the evening he had to come again to the hospital, because the nurse, in cleaning the instruments, had found that one pair of forceps was missing. Mr. Wells had to open the wound and fish for the forceps before he found them. You see that we cannot be too careful in counting the instruments and sponges. I know of one instance, where a gentleman, while breaking up adhesions, was on the point of losing a large seal ring, and would have lost it in a moment more, if his attention had not been called to it by a bystander."

A piece of salicylized cotton was then moistened in the spray and placed over the wound, a pad of raw cotton, secured by half a dozen adhesive straps, was used to fill up the hollow in the abdomen, and the dressing was finished with a flannel binder.

"What will her diet consist of? As she has been starved to day we shall not be troubled with vomiting. She will receive nothing to eat for forty-eight hours. If she is thirsty, she will receive a little hot water—sips of very hot water—and if necessary a little ice, but the hot water is preferable to the ice. After that time we shall begin to give her a little milk. Immediately after the operation, an opium suppository will be slipped into the bowel. Enough opium will be given to relieve what pain she may have.

"A word in regard to the spray. Some ovariotomists are giving up the use of the spray, but I am not ready to give it up, especially when I have you gentlemen present, for you have been around the dissecting room and the wards of hospitals. I should not have ventured to have you present, even with the spray, if I had not, when in London this summer, seen the operation performed successfully in the presence of a large number of persons."

The patient was then put to bed and cans of hot water placed along the body.

The time occupied in performing the operation was forty minutes. She recovered promptly and without any bad symptom.

Editorial Department.

Periscope.

Subcutaneous Ligature in Varicocele and Varix.

Mr. John Duncan says, in the *British Medical Journal*:—

The treatment of varicocele always presents a certain difficulty to the surgeon. This disease is not dangerous to life, nor does it seriously interfere with ordinary functions and avocations; but it is a source of harassing if not severe pain, is a matter of solicitude to the patient, and in some cases leads to wasting of the testicle. The former considerations have led some to recommend palliation by suspension, the vein-truss, and the cold douche; while the immense number of operative measures which have been devised, and which are not devoid of danger, bear witness to the importance of the latter. In the subcutaneous ligature by catgut we have a means of meeting the difficulty. It is singularly easy of application, free from risk, and very certain in its results. The mode of applying it is as follows: The veins are carefully separated by the fingers

from the artery and vas deferens, and a needle armed with catgut is thrust through at the point of separation; it is again introduced at the orifice of emergence, made to pass between the veins and the skin, and finally brought out at the original entrance. The two ends are then firmly knotted with as much force as strong catgut will bear, and cut short. By traction on the loose skin of the scrotum, the knot is made entirely to disappear, and the punctures are covered with salicylic wool saturated with collodion. The same manœuvre is repeated at a distance of an inch or a little more. I have now performed the little operation six times with complete success. In two cases, three ligatures were applied; but, in the others, to tie the vein at two points has been found sufficient. The effect is the formation of a hard lump of coagulum between the ligatures, at first slightly tender, but which soon becomes perfectly callous. I have just examined a patient on whom I operated more than a year ago. He gives me the most satisfactory assurances of complete relief. A small, hard nodule is still to be felt; the testicle is a little larger than its fellow; and the superficial scrotal veins are somewhat distended. But he feels no inconvenience, and has given up the suspensory bandage which he wore before the operation. The other cases have turned out equally well, and in one of them there has also been a year's probation. In two of them there had been previously some wasting of the testicle; but I hear that this has not as yet progressed further.

The success of the treatment of varicocele by this means induced me to apply it also in varix of the leg. So long as a varicose vein is not a source of inconvenience or danger to the patient, the general opinion seems to be that the use of the elastic stocking is all that is necessary. If that be not effectual as a cure, at least it prevents further deterioration. I should be inclined to say that, even in advanced cases, the stocking ought first to be tried; but when solid œdema and eczema and ulceration cannot thus be kept in check, or perpetually recur, some more radical measure becomes plainly desirable. There are also cases in which a limited portion of a single vein is greatly distended, and in which, although giving rise to little inconvenience at the time, it is, from its high situation, difficult to control by pressure, and likely, therefore, to spread and increase. In such cases, if a radical remedy be simple and safe, it ought to be applied. Some have objected to all operations involving the obliteration of a vein, that there is a likelihood of others becoming varicose; and that the deep-seated varicosity thus induced is apt to be painful. But I am sure that must be rare. Undoubtedly the same causes which were originally at work may be allowed to continue their action in other veins, through want of care; but it is not consistent with experience that, when one vein or set of veins is obliterated others become varicose. On the contrary, veins on which backward pressure is thrown tend to varicosity; but parallel channels only enlarge and dilate. There is a long step between varicosity and simple dilatation. Large portions, for example, of the femoral vein often become obstructed in fever and other blood diseases. The leg may afterward remain permanently enlarged; but the veins are little more prone to varicosity than in the sound limb. But even if such were the case, a problematical future evil would not justify abstention from what otherwise is beneficial; and the improvement that follows obliteration of a varicose vein is rapid and distinct.

The operation is performed precisely as for varicocele. The needle is passed first under the vein, and then between the vein and the skin, entering and emerging by the same punctures. It is not so easy to draw the skin over the knot after ligating as in varicocele; and this will be facilitated by slightly enlarging the puncture by means of a tenotomy knife. When, as is sometimes the case, the limb is swollen and brawny, and the veins run, as it were, in gutters cut out of the solid œdema, the difficulty of operating is considerably increased. In such cases I have, as a preliminary, kept the patient at rest, and applied the India-rubber bandage for a few days. It is always of advantage, during the operation, to have the limb gently constricted by a bandage above the point of ligature, in order that the veins may be distended with blood, which afterwards coagulates.

The Treatment of Hay Asthma.

The following summary of treatment is given by Dr. J. C. Thorowgood, in the *Lancet*, July 16th:—

Anti-congestive Remedies.—Of these one of the best is ammonia, used in the form of ordinary Preston salts (a mixture of the neutral carbonate of ammonia with oils of cloves and lavender), or as ammoniacal vapor, inhaled for a few minutes from a mixture of twenty drops of the liquor ammoniæ (B. P.) in a pint of water at 80° F. Ten drops of spirit of camphor and three to five of eucalyptus oil may often be advantageously added to this inhalation. The ammoniacal vapor slowly inhaled by the mouth and exhaled through the nostrils acts as a stimulant and promotes the mucous flux, by means of which the congested vessels are already commencing to relieve themselves. The action of the ammonia permanently tends to diminish hyperæmia of the mucous membrane, and in this respect ammonia differs markedly from other stimulating inhalations, which give only temporary relief. Properly managed inhalation of chloride of ammonium is useful in cases where hyperæmia of mucous surfaces is very marked and chronic.

With a view to destroying the pollen granules in the nasal passages, drawing up into the nostrils, or inhaling as spray, a solution of sulphate of quinine is decidedly useful. Ten grains of the sulphate may be dissolved in one pint of distilled water and this solution snuffed up into the nostrils—a method preferable to the employment of the solution by the nasal douche, for more than one reason.

Last summer I tried, for the relief of the throat irritation of summer catarrh, lozenges containing one grain of salicylate of quinine in each lozenge. The salicylate is supposed to act as a germicide, and destroy the vitality of any inhaled pollen germs. Carbolic acid vapor is very useful.

Iodine vapor I have also tried as an inhalation, but never saw any benefit come of its employment. A liniment of equal parts of chloroform, simple camphor liniment, and eucalyptus oil rubbed well round the throat relieves irritation; the smell, too, of the antiseptic eucalyptus oil is, at the same time, not without good effect. When the congestion and catarrh have extended downward to the air-tubes, so as to cause bronchial spasm and regular attacks of hay asthma, then few remedies appear to surpass arsenic, and this may be employed by vapor or by the mouth. As a remedy for asthma arsenious acid has long been used by the Chinese.

I have had opportunity of trying nitrated paper cigarettes, after the formula given by Trousseau, so that each cigarette contains three-quarters of a grain of the arseniate of soda, and find them very satisfactory. The patient should inspire deeply three or four times from the cigarette, then wait awhile, and see how he feels. I may say that I have never known any unpleasant effect to be caused by the careful administration, in any form, of arsenical remedies.

The headache and distressing after feelings that so often follow the use of fuming inhalations of stramonium, belladonna, or opium cigarettes and powders, usually make persons averse to their employment, unless the asthma comes on with great force. Tobacco smoking, however, is a general and approved source of relief.

Internal Remedies.—Space permits me to mention but a few of these, and among them I would give the first place to the preparations of arsenious acid. The acid may be given in a granule or pill, in commencing dose of one-fiftieth of a grain three times daily, one hour after food. Over both the catarrh and the bronchial spasm its effect will be found marked and decided, while gastric irritation and tendency to sickness often are much relieved, making one think the remedy may have some special action over the pneumogastric nerve.

The solution of arseniate of soda, in dose of two to five drops in water, may agree better than the arsenious acid in some cases; but if neither succeeds, then it is well worth while to try the following combination: Fowler's solution, two minims; potass. iodid., two grains; liquor ammoniæ, five minims; water, one ounce; three times a day. It will succeed where arsenic and iodide of potassium separately fail to benefit. Troublesome œdema about the face and eyes, remaining after the more severe symptoms of asthma are gone, I have found to give way speedily to tincture of cantharides, in doses of five minims with twenty of spirit of nitrous ether, in water, three times daily. A remedy, strongly recommended by Dr. Gream in 1850, is tincture of nux vomica; and there is no question as to its value in old standing asthma with flatulent dyspepsia and irregular, weak action of the heart. In these cases it goes well, in doses of five to ten minims, with dilute phosphoric acid and tincture of ginger. When Gream employed it in summer catarrh he also used acetate of lead ointment, applied high up the nostrils, a remedy which, like snuff of bismuth subnitrate, would undoubtedly do much to relieve local irritation and congestion.

Another remedy, somewhat similar in action to nux vomica, inasmuch as it agrees remarkably well in cases of asthma with feeble cardiac power, is the citrate of caffeine. Two or three grains of the citrate dissolved in water or in warm coffee are by no means an unpleasant dose, and in such cases as those just indicated, it is unquestionably of considerable value. Where the citrate of caffeine fails to give decided relief to the asthma, it nevertheless, as patients have informed me, greatly mitigates the exhaustion and depression that had been previously experienced after the severity of the attack had passed away.

Sayre's Bandage in the Treatment of Fractures of the Vertebræ.

At the last meeting of the Association of German Surgeons (London *Medical Record*), Dr. Küster (Berlin) said the efficacy of Sayre's plaster-of-Paris bandage in cyphosis had suggested its use in fractures of the vertebræ. He had used the plaster jacket in four such cases. In two cases of fracture of a lumbar vertebra, with symptoms of paralysis of the bladder, rectum, and lower limbs, it had been applied with good result; while no improvement followed in a case of fracture of the third dorsal vertebra. In a case of fracture of the middle part of the dorsal spine, with the formation of an angular projection, and complete paralysis of both arms and legs, and also of the bladder and rectum, Dr. Küster had broken up the callus under narcosis, and applied extension (up to twenty pounds); the result being a complete disappearance of the paralysis. Dr. von Langenbeck had applied the plaster-of-Paris bandage in a recent fracture of the dorsal spine in 1862; it was, however, not well borne, and up to the present day he had obtained better results by placing the patient on a water-bed and applying extension by weights. Dr. Bardeleben (Berlin) was not an opponent in general of Dr. Küster's plan of treatment; but he would recommend that the plaster bandage should not be applied immediately in cases of fracture of the spine, as such fractures were always complicated with other injuries; and it might happen that symptoms of paralysis, which were even strongly marked on the first day, might disappear in a short time without any treatment. Dr. Sonnenburg (Berlin) had attempted, in the Berlin Clinic, to apply the plaster-of-Paris jacket, without narcosis, in the case of a child suffering from disease of the cervico-dorsal region of the spine. During suspension, difficulty of breathing suddenly set in; and the child died in an hour and a half, in spite of tracheotomy and artificial respiration. At the necropsy, along with disease of the lower cervical and first dorsal vertebræ, there was found to be a large abscess extending into the posterior mediastinum; it had not burst. Probably this abscess had caused death by pressing, during the suspension, on the trachea, and on the pneumogastric and phrenic nerves. The spinal cord showed no change. Dr. Basch (Bonn) had become very cautious in the use of suspension in spondylitis. Forcible extension led to the formation of abscesses. He had had under his care a case of fracture of the

spine with disturbance of motion and sensation, in which recovery took place under suspension and the plaster-of-Paris bandage. Dr. König (Göttingen) said that the plaster bandage would probably only come into use in slight cases of fractured spine. In severe cases it would be dangerous to suspend to any important extent. Dr. von Langenbeck treated Pott's disease with the plaster jacket only in cases where the children could be examined daily, and the danger of bed sores be thus averted. Chloroform was to be recommended in the application of the bandage, as it prevented violent movements on the part of the children, and thus obviated accidents. The plaster jacket was not suitable for the treatment of scoliosis. For this he used only Taylor's bandage. Dr. Wagner (Königshütte) advised caution in the application of the gypsum jacket in recent cases of fractured spine, lest the blood extravasated into the spinal canal should undergo compression. In one case he had seen paralysis appear on the application of the bandage, which was, therefore, immediately removed. In four subsequent cases he had allowed fourteen days to elapse before applying the plaster bandage, and recovery had taken place in another four weeks. Dr. Busch (Bonn) recommended the plaster jacket in the treatment of scoliosis. Bed sores could be prevented by a pad of cotton wadding on each side of the projection.

The Electrical Treatment of Dysmenorrhœa.

Dr. J. D. Mann writes, in the *Lancet*, July 23d:—

The now old-fashioned term "neuralgic dysmenorrhœa" still expresses all that is known of the causation of many cases of this disorder. All that can be diagnosed in an otherwise healthy uterus is an irritable condition of the mucous membrane of the cavity, which, under certain circumstances, evokes painful, clonic contractions of the organ. In such cases, when the sound reaches the uterine cavity, the patient experiences pain identical with that of dysmenorrhœa, the contact of the instrument with the neurotic membrane being sufficient to set up irregular uterine action. In this form of the disease much relief is afforded by electricity, the result probably of altered nutrition, and of the direct action of the current on the terminal nerves. Associated more or less with dysmenorrhœa is ovarian irritation or neuralgia. When not dependent upon uterine disease this disorder may be successfully treated by electricity, on the principles already laid down. It is often sufficient to administer a current of eighty-five or ninety dix-millivebers, by means of external electrodes, the anode being placed over the affected ovary or ovaries, and the cathode over the lumbar spine. If the accompanying dysmenorrhœa is urgent, it is preferable to introduce the anode into the uterus, and apply the cathode over the ovarian region. If there is suspicion of ovaritis, electricity is not admissible; but tenderness, with slight enlargement of the organ (recognizable on bi-manual examination), with absence of systemic disturbance, is probably due to passive hyperæmia, and is often greatly relieved by the constant current. The relief afforded in simple ovarian irritation is frequently very striking, a soothing effect being experienced by the patient almost as soon as the circuit is closed. In many cases the result of the treatment will be rendered more permanent by the administration of the following nervine tonic: Valerianate of zinc, valerianate of quinine, valerianate of iron, of each one grain, made into pill; one to be taken twice a day. The pills should be protected by an impervious coating, as the combinations of valerianic acid have an exceedingly disagreeable odor.

Some forms of sub-involution of the uterus are amenable to the action of electricity. Retarded involution cannot be regarded as a disease *per se*, but rather as the result of one or more morbid conditions. Retention of fragments of placenta or membranes, inflammation of the cervix from laceration or bruising during labor, and partial prolapse, are among the most common causes. It is obvious that sub-involution thus produced can only be cured by the removal of the exciting cause, and this is to be accomplished by means other than electricity. Simple sub-involution dependent upon muscular atony, or upon malnutrition, alone comes within the range of electro-therapeutics. For the treatment to be successful it is essential that the disease should be attacked in the early stage. It is well known that prolonged hyperæmia produces hyperplasia of the areolar tissue in the organ or part affected. When once this stage of sclerosis is reached in the uterus, and an excess of fibrous tissue obtains over the muscular elements, absorption becomes a matter of grave difficulty, if not an impossibility. In dealing with a hypertrophied uterus composed of a mass of muscular fibres infiltrated with fluid, and but sparingly so with cellular growth, any method of treatment which will stimulate the nutrition of the organ and accelerate the absorption of the morbid products tends to promote a cure. Such a stimulant is electricity. Unless contra-indicated an insulated sound forming the cathode is introduced into the uterus, the anode is placed over the lumbar spine, and a current of about ninety dix-millivebers is passed for ten or twelve minutes, every alternate or third day. During the first half of each application the current should be stabile; during the latter half it may be interrupted at intervals, in order to stimulate the contractile properties of the womb. While the interruptions are being made it is desirable to reduce the current strength, as the opening and the closing of the circuit are attended by slight shocks, which are very disagreeable, if too strong. The patient should maintain the horizontal posture for some hours after each application. If the uterine wall is so soft as to render the passage of a sound dangerous, a cervical electrode may be used in place of the sound. In a case of sub-involution which I recently treated with electricity, each application was followed by a temporary discharge, and slight pain, of the after-pain type; the uterus was reduced to its normal condition in seven weeks. I need hardly observe that perimetric inflammation, or any latent pelvic disease, is contra-indicant of the internal use of electricity.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"Aids to Rational Therapeutics," by J. Milner Fothergill, M.D., M.R.C.P. of London, published by G. P. Putnam's Sons, New York, is a paper-covered book of one hundred and twenty-five pages, well worth the small price asked for it, twenty-five cents. It teaches the student and practitioner how rationally to prescribe, a point too much neglected in medical education.

——From the Government printing office at Washington, we have received the "Annual Report of the Supervising Surgeon-General of the Marine Hospital Service of the United States," for the year 1881. This pamphlet, of more than two hundred and forty pages, besides containing very much valuable and interesting information, has an article by E. Hebersmith, M.D., Surgeon U. S. Marine Hospital Service, on Beri-beri, which is well worthy of perusal. It seems from this report, that Beri-beri is a disease produced by some specific atmospheric poison (nature unknown), whose development is fostered and hastened by bad hygienic surroundings.

BOOK NOTICES.

A Pocket-Book of Physical Diagnosis, for the Student and Physician. By Dr. Edward T. Bruen, Demonstrator of Clinical Medicine and Lecturer on Pathology of the Urine in the University of Pennsylvania; Lecturer on Pathology in the Woman's Medical College of Philadelphia, etc., etc. With wood engravings. Philadelphia: Presley Blakiston, 1012 Walnut street. 1881. Cloth, small 8vo, pp. 256. Price $2.00.

The author of the work before us has for several years been engaged in teaching diagnosis to private classes, and it is the substance of the instruction thus given that he has here arranged in book form. The methods of diagnosis are minutely described, and the alterations in the percussion note, in the respiratory murmur and the heart sound, consequent upon structural changes or functional disturbances, are lucidly explained. The whole subject has been treated with thoroughness and care, and the work is one which we can conscientiously recommend to students and practitioners as a reliable guide to the acquisition of skill in physical diagnosis, which justly is regarded as one of the most brilliant accomplishments in the domain of medicine.

Manual of Organic Materia Medica. By John M. Maisch, PHAR. D., Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy.

This publication is evidently designed more particulary for the use of students of pharmacy and druggists, than physicians. The classification adopted is based upon the similarity in the physical and structural properties of drugs, and to those who are not so much interested in their action upon the animal economy, this is a well chosen arrangement. By this selection drugs from the same part of the plant are brought together, and in consequence there are chapters (in Part Second) devoted to roots, rhizomes, flowers, fruits, etc. Part First treats of animal drugs. Part Third of drugs without cellular structure, embracing sugars, gum resins, volatile and fixed oils, etc.

The numerous illustrations, many of which we recognize as identical with those of the National Dispensatory, make the book appear simple, easy, and even attractive, but upon close examination one is disappointed. The book is less interesting than the Organic Materia Medica, published about two years ago; that we thought dry and heavy.

The bare citation of facts, devoid of interesting detail, becomes monotonous and tiresome, and information is less readily inculcated. This being the primary object of such works for students, we consider it, in this respect, quite deficient. The illustrations of microscopic structure are quite an addition to this text-book, but some important sections are not shown, as might be expected, *e. g.*, Podophyllum.

The cuts showing transverse sections of the various roots of sarsaparilla do not show them as they appear under the microscope. They, like many of the cuts, seem to be diagrams—good as far as they go, but are imperfect representations of microscopic transverse sections. Gelsemium is one among a number not sufficiently magnified to illustrate the true cellular structure. Taken as a whole, they are representations which will be of good service to the student of histology in pharmacy.

The metric system introduced in the book is a feature worthy of mention. One thing the book is prominently deficient in is, the omission of the names of the officinal preparations into which the various products of materia medica enter. This point is one in which the student and apothecary should be as well drilled as in the origin, structure, or medicinal properties, and in a work of this kind such an addition would be quite valuable.

Transactions of the New Hampshire Medical Society, at its Ninety-first Annual Session, held at Concord, N. H., June, 1881. pp. 168.

The subject chosen by the president, Dr. G. P. Conn, for his address, was State Medicine. He spoke of the progress already made in State or preventive medicine; how the people are becoming every year more and more interested in matters pertaining to the prevention of disease; how twenty-one States have already established boards of health, and also of the influence of the National Board of Health, and closed his address by an eloquent appeal to every intelligent, public spirited man to join in advancing the interests of public health, by the enactment of laws for the advancement of preventive medicine. Dr. A. H. Crosby read the report on surgery. For this report a paper was furnished by Dr. F. A. Stilling, giving cases of malignant disease, with a report on the use of the Dermal Curette; and Dr. John R. Ham furnished a contribution to the Study of Fractures and Dislocations. Dr. J. W. Parsons read a paper on Puerperal Convulsions; Dr. J. R. Kimball, on Conservatism in the Practice of Medicine; and Dr. D. W. Jones, on Nihilism in Medicine. Several other papers and reports were also read.

Lectures on the Pathological Anatomy of the Nervous System, Diseases of the Spinal Cord. By J. M. Charcot, Professor to the Faculty of Medicine of Paris, Physician to La Salpetrière, etc., etc. Translated from the reports by Dr. E. Brissaud, in the *Progrès Médicale*, by Cornelius G. Comegys, M.D., Lecturer on Clinical Medicine in the Cincinnati Hospital, etc., etc. With illustrations. Cincinnati: Peter G. Thomson, 1881. Cloth, 8vo, pp. 165. Price $1.75.

These lectures, seventeen in number, formed Prof. Charcot's course for 1879-'80, and were reported in the *Progrès Médicale*, by Dr. E. Brissaud. Dr. Comegys' translations first appeared in the Cincinnati *Lancet and Clinic*, beginning in September, 1880, and have now, by request, been republished in book form. As a contribution to scientific medicine they are undoubtedly among the most valuable of recent productions. While they, therefore, will be read with interest by the speculative and philosophical theorist, and while the facts here taught will ultimately lead to valuable practical results, the busy physician will find little to attract him or to turn to practical use. The translation has been well performed, and the book is gotten up in good style.

A Handbook of Uterine Therapeutics and of Diseases of Women. By Edward John Tilt, M.D., Past President of the Obstetrical Society of London; Knight of the Crown of Italy, etc., etc. Fourth Edition. New York: William Wood & Company, 27 Great Jones Street. 1881. Cloth, 8vo, pp. 328.

This constitutes the volume for November, of Wood's Library of Standard Medical Authors. After a brief introduction, in which the study and practice of gynecology are discussed in a general way, the author proceeds to describe the modes of examination and surgical instruments. After which comes a chapter on uterine surgery. Dietetics and home treatment also receive full attention, the remainder of the work being devoted to uterine medication proper and the medicinal agents used in gynecological practice, the treatment of displacements, complications and sterility, with a final chapter on the prevention of diseases of women. The book is one that will be found useful.

Nervous Diseases: Their Description and Treatment. A Manual for Students and Practitioners of Medicine. By Allan McLane Hamilton, M.D., Fellow of the New York Academy of Medicine, etc., etc. Second Edition, revised and enlarged; with seventy-two illustrations. Philadelphia: Henry C. Lea's Son & Co. 1881. Cloth, 8vo, pp. 598.

In bringing out a second edition of his work on Nervous Diseases, the author has availed himself of the opportunity to thoroughly revise the text of the former, and to make such additions as recent advances in neurological medicine would call for, thus enlarging the volume by nearly one hundred pages. Many new illustrations have also been added. This work is well adapted to the wants of the general practitioner, for whom it seems to have been especially written. It is a thoroughly practical book, the careful study of which will render the diagnosis of nervous affections the more easy, and their treatment more successful. Several important cases are recorded, giving the additional value of clinical tests to the teachings set forth. Morbid anatomy and pathology receive full attention, and the results of numerous post-mortem examinations are given.

Being carefully and thoroughly indexed, in plain, large type, containing also a table of contents, as well as a list of illustrations, this book is rendered very useful as a reference work for the busy practitioner, to whom we can commend it.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

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WHY NOT CONSULT WITH HOMŒOPATHS?

We do not like to recur often to the relations of homœopathic practitioners to the regular profession. So far as homœopathy itself is concerned, it is now no longer Hahnemannism. Not a single precept of its founder is now respected in full by his followers. Its value as a dogmatic school is, by its own confessions, long since past.

Does that bring it nearer the position it should assume? Is that a reason why its advocates should be recognized by the regular profession?

We say, emphatically, *No.* Homœopathy is now not even true to itself. It is sailing under false colors. It is pretending to the public to be what it is not. It is deluding those who trust to it.

There is no reason why many modern homœopaths should not unite with the scientific part of the profession. Yes, there is one reason, and only one, and this is no credit to them. It is that by unfolding the homœopathic banner they may capture more patients. This, and only this, is the reason that restrains these practitioners from joining us.

It is an all-sufficient reason for the profession to refuse to consult with them. No matter whether therapeutics are alike or not; no matter whether the consultation is intended to be for diagnosis alone; yet it is deteriorating to a man to countenance deception in another; it is compounding a social felony.

Hence we have no hesitation in condemning the recent action of the British Medical Association, which declined to expel a member who had openly turned homœopath. It was said, in defence of their inaction, that to expel him would have advertised him, and enlisted for him the sympathy of the public. Such reasoning is futile. The thing which is right should be done, and let the consequences take care of themselves.

No more do we approve the recommendation of that Association's lecturers, which we recently quoted, to consult with homœopaths, when asked. Such a recommendation is inconsistent with our duty toward our patients, and contrary to the dictates of scientific reasoning. We have shown this repeatedly, and it is not for any such purpose, it is not for the benefit of the patient, that this relaxation of ethics is suggested.

We know the secret motive at its base, and without mincing matters, we shall expose it.

The prominent physicians and surgeons in great cities find their most profitable business in consultation practice, and as a great many wealthy families have homœopathic attendants, consultations in such cases are impossible, if the code is strictly observed. This cuts down incomes very decidedly, and how to get around the difficulty is a frequent matter of thought.

Some are bold enough to go when they are asked, without knowing or caring of what school, color or sex the attending physician is, and spurning the terrors of "the Code" with contempt. Most, however, shuffle and palter, to frame excuses and pay a seeming deference to ethics. A few refuse squarely to meet any but graduates of regular schools.

These are facts, and knowing them, we are not

surprised at the effort of a few London physicians to break down the barriers; nor are we astonished to find that effort seconded in New York city. In one of the late issues of the *Medical Record* is an editorial, clearly aimed at supporting this step, and at introducing it into that city. The motive is unquestionably the same, and it should be exposed. It is not humanity, the welfare of the patient, nor at all the dignity and morals of the profession, which are considered by the advocates of this action, but the pockets of physicians who have a large consulting practice.

Such being the case, no good can be expected from the movement. We consider it one in a false direction, prompted by selfish and unworthy motives, hypocritical, in that it pretends to a higher origin, and unfair to the mass of the profession. Let us retain our principles free from the stain of such imputations. Let us insist that those practitioners who no longer practice homœopathy shall also be honest enough to drop the name of it before we receive them in fellowship.

BIDDING FOR PRACTICE.

A correspondent from a western State asks us, "Is it in good taste, and no infringement of the code of medical ethics, for a medical society in whole, or its members individually, or any medical man, to bid, by sealed proposals or otherwise, for the pauper practice of a county or township?"

This question involves a good many side issues. It is generally held by the most respectable members of the profession, that a physician sacrifices some of the dignity and respectability of his profession as soon as he commences, in any way, to solicit practice. It is the rule, in our profession, that practice must seek the man and not the man the practice. While this custom may seem to some to constitute a hardship, yet in reality it is a most excellent condition, for by and through it is brought into play that most beautiful law of the survival of the fittest. When practice comes to a capable man, as it always will sooner or later, he properly performs the duty which has fallen to him, and from this proper performance of duty receives his advertisement. While the incapable and deficient medical man, though he may for a time *seem* to prosper, eventually fizzles out, as it were, and finds his level.

An exception to this rule, however, would seem to hold in the cases of the specialists of our large cities, who derive their extensive practice and large incomes principally from a judicious course of personal advertising. Note the successful oculist, or aurist, who, in dress suit and white kids, visits the opera. During the intermission between acts, he stands up in the most prominent part of the house, and through an immense pair of opera glasses, eyes the whole audience for some fifteen or twenty minutes. Naturally enough, every one who knows him not at once asks some neighbor who he is; they look and stare at him, and wonder who he is, just as they would look and stare and wonder who any other conspicuous figure might be. Some well-informed member of society announces that it is Dr. So-and-So, the famous oculist, or aurist. The next morning, or within a few days, this person has an eye-ache, or an earache; off he rushes to Dr. So-and-So, who receives him in gorgeously furnished offices, talks to him for ten minutes, prescribes some simple eye wash (well known, in the majority of instances, and frequently used by every well-informed practitioner), charges him ten dollars and tells him to call again. Six or seven such consultations constitute his day's work. Then a handsome carriage and spirited horses, with coachman in livery, appear at the front door, and our specialist goes out for an airing, and to still further advertise himself by his fashionable turnout. Home to an epicurean dinner, after which the opera again, the theatre, or a dinner party.

Such is the routine of our present fashionable *specialist*, and by such advertising he makes plenty of money. In the abstract this is wrong, but since it is sanctioned by society, and encouraged by the liberal fees of the fashionable and

wealthy, it will do no good to condemn it. Since these specialists are usually powers in society, and (to their credit be it said) liberal to the cause of medical progress, therefore, their course is tacitly recognized by the medical profession, since it is not openly condemned. But to answer our correspondent, we would say that the code of ethics would not sanction or approve the act of a physician who would endeavor to procure practice in the manner he mentions, and would hint to him to suggest to the county commissioners the fact that, in all probability, the lowest bidder would be the poorest physician, since in medicine, differently from in trade, the man who possesses the greatest stock of knowledge and experience usually wants the highest price for it.

Notes and Comments.

Premature Menstruation.

Dr. Prochownick, of Hamburg, stated that a district physician had called his attention to a child three years of age, highly scrofulous, who, since one year old, was subject to regular catamenial discharges, lasting from two to three days, every four weeks.

This child died of miliary tuberculosis two days after such a flow, and an autopsy was made twenty hours later. The uterus was not large, but its mucous membrane had every appearance of being *post menses*. Its size, thickness, dimensions, and the proportions between the neck and body, far exceeded those usual in the uterus of a child of that age.

It is interesting, therefore, to observe that this menstruation was incidental to a regular evolution of the ovules.

This case is important, because it shows the primitive relation which must exist between menstruation and ovulation.

Engine Drivers' Deafness.

In the London *Lancet* of December 24th, 1881, Moos makes some interesting remarks on this subject. According to his observations, the drivers and stokers of railway engines suffer, sooner or later, from diminished acuteness of hearing, due to their occupation. Usually bi-lateral, this defect becomes manifest sooner in the men employed on railways in which there are many tunnels, than in those who drive engines in level country. Swaback and Pollnow have arrived at the conclusion that this class of employees almost invariably suffer, in the course of time, from diminished acuteness of hearing; of 160 examined, 20 per cent. were found to be more or less deaf. In most cases a distinctly morbid condition of the membrana tympani was observed, which indicated a sclerotic form of chronic catarrh of the middle ear. It was considered by these observers, that this diminished acuteness of the sense of hearing was not dangerous. We must agree with the editor of the *Lancet*, that the engineer of a locomotive has so much responsibility resting on his organs of special sense, that it is imperative that all of his senses should be perfect, and their acuteness entirely unimpaired. This is a question open to practical demonstration, and it would be well for railway officials to turn their attention in this direction.

Circumcision as a Sanitary Precaution.

Dr. Edward T. Williams, in a paper read before the Norfolk District Medical Society, November 29th, 1881, and published in the Boston *Medical and Surgical Journal*, thus discourses on the sanitary value of circumcision: "It probably does good in several ways.

"1st. The exposure of the glans penis to the air and to friction from the clothes dries and hardens its surface, and renders it less liable to abrasion in sexual intercourse, and consequently to venereal ulcers.

"2d. The removal of the foreskin is acknowledged to be useful as a preventive of masturbation. It not only renders the act itself more difficult, but by diminishing the sensibility of the part and favoring the removal of irritating secretions, diminishes also the propensity to the act.

"3d. It prevents the accidents of phymosis and paraphymosis.

"4th. It prevents the retention of the sebaceous secretion and the ensuing balanitis.

"5th. It probably promotes continence by diminishing the pruriency of the sexual appetite."

Fashion vs. Health.

From a secular newspaper, we notice that a woman of good form is only spoiled by the corset. The curves of the body are all outward curves, one arising out of the other. But the chief curves of the corset are inward curves, which are not only incorrect, but are the source of great damage, in compressing unnaturally the organs of the body. Another objection to the corset is in the bones, whose rigidity obscures that rippling movement

of the body which is one of its chief beauties. As far as this is concerned, the body might as well be incased in cast iron. Another objection is in the hard cross line of the bust, which distinctly shows, as do often the laces, under a tight-fitting dress.

With pleasure we read every effort on the part of the secular press to urge the public to place health before fashion, and trust that this very important suggestion will be made public everywhere, and that physicians will use their very best efforts to induce their patients to be guided by it.

Poisoning by Aconite.

The coroner's hearing in the case of Dr. Lamson, the son of the American clergyman at Florence, who is accused of having poisoned his brother in-law at Wimbledon, with aconite, is still in progress. Some very elaborate experiments are being conducted by Drs. Stephenson and Dupré. A case of poisoning similar to this had not taken place for a long period, the time being given by some persons at over 100 years. It is natural, therefore, that the symptoms presented should be new, and in order to form an accurate judgment of them, it is intended to experiment with aconite upon the bodies of animals.

A later despatch from London, says the coroner's jury in the case of the young student, Percy M. John, who died at the Blenheim House School from the effects of poison, as ascertained by medical investigation, has found a verdict of willful murder against Dr. George H. Lamson, brother-in-law of the deceased. Dr. Lamson is the son of the American chaplain at Florence, Italy. It was brought out in the course of the present case, that the deceased student was entitled to the sum of £3500, which, on his death, reverted to his sister, the wife of the prisoner. Just previous to Percy's death, the prisoner was in want of money and had pledged his watch and surgical instruments. He pretended to go and see the young student, and said that the youth was very sick and could not live long. He administered some medicine to him which, it was ascertained, was aconite in the form of a capsule. This caused Percy's death. The day the young man died, Dr. Lamson left for Paris.

Health of New York.

In glancing over the vital statistics of New York, for 1881, several interesting points are noted. We all remember how filthy the streets of that city were last winter and early spring, and now we see that the death rate last year was 31.07 per 1000, while in 1880 it was only 26.47 per 1000, and only 24.50 per 1000 in 1877. Smallpox carried off 450 persons, as against only 81 in 1880 and 2 in 1878. Diphtheria was fatal to 2237 persons. Children were born in five instances to mothers who were under fifteen years of age, and in three cases to women over fifty. One mother was but 13 years and 10 months. 472 of the fathers were over fifty, while 58 were under twenty years. 17 persons over one hundred years old died, one of them, an Irish woman being 110, one 106, and three 104. Eleven of these centenarians were women, and six men.

True Cause of Malaria.

The *Public Ledger* says: It has been remarked that in very many cases in the upper part of New York City where cellars are being excavated and much old soil is being upturned, the inhabitants of the neighborhood suffer from malaria. We can readily believe this to be true, since the element necessary for the production of malaria (organic material) is, by cellar excavation, brought into a condition in which it is capable of producing malarial poison. In other words, organic matter is exposed to heat and moisture, and decomposition results. This practical demonstration in New York, is an additional argument in favor of the theory that organic decomposition is, in all cases, the cause of malaria, which really means nothing more than bad air, rendered bad by the admixture with it of the results of organic decomposition.

Cigarettes.

"'Cigar smoke puffed in a man's face by another man is assault and battery,' says a New York Judge. If that is the case, cigarette smoke puffed anywhere in one's neighborhood should be considered murder in the first degree."

This is a true condemnation of cigarette smoking. It is a fact, not disputed, that the majority of cigarettes are not only made of the most inferior tobacco, cigar stumps from syphilitic mouths and filthy gutters, but that both paper and tobacco do contain much poisonous drug adulteration.

Quadruple Amputation.

In the New York *Medical Journal*, Dr. W. S. Tremaine, Assistant Surgeon United States Army, reports the case of a soldier who was brought into the hospital at Fort Dodge, with both hands and feet completely frozen. Amputation of both hands and feet was performed, and the patient recovered.

Sudden Death During Forced Depression of the Tongue.

A woman sixty years old, suffering from tinnitus aurium and partial deafness, applied to Dr. Moure, who ascertained the existence of catarrh and obstruction of both Eustachian tubes. Wishing to examine the pharynx, he directed the patient to open her mouth; the tongue being in the way, he introduced a depressor. No sooner had he depressed the tongue than the patient drew a hissing inspiration, and commenced suffocating. Believing he had to deal with a spasm of the glottis, the Doctor had recourse to artificial respiration, but asphyxia increased, râles set in. Tracheotomy was then practiced, but asphyxia continued, spumous blood was discharged through the cannula and by the mouth, and the patient expired.

The Doctor believed that the spasm of the glottis occasioned by a forced depression of the tongue would not of itself have been sufficient to cause death in a strong and healthy person, but in the present instance, the patient being under some emotion, an old cardiac affection had probably been awakened, and a rapidly fatal congestion, or apoplexy of the lungs had followed. This opinion was to some extent borne out by the fact that the patient showed marks of scarified cups under the left breast.

In commenting on the above case, the editor of *Paris Médical* (*No.* 46) observes that it accords with what he has long ago published on asphyxia caused by enforced immobility of the tongue. If a patient's mouth be immoderately opened by means of a gag, the tongue can no longer move, deglutition of saliva becomes impossible, and the larynx is immobilized. Under these conditions rapidly fatal asphyxia can be produced. An instance of it has been observed. Satisfactory evidence may be obtained from the following experiment: Let the tongue be immobilized by placing a finger upon it, the mouth being opened or closed; or let the jaws be kept wide open by a bit of wood inserted between the teeth, and the result will be a respiratory anguish which, if prolonged, would lead to asphyxia.

Imagination a Cause of Death.

The following item will be of interest, since it seems to prove that imagination may obtain such control over a man as even to cause his death: "The coroner's jury who investigated the death of Frederick Miller, at the Second District police station, from the supposed effects of hydrophobia, adopted the view of Dr. Duvall, who attended Miller, that his death was due to exhaustion, the result of acute mania; in other words, that he frightened himself to death." We believe that imagination and fear really did cause death in this case. The man was bitten some time since by a small dog, and from that time up to his death he was constantly apprehensive that he would have hydrophobia. Finally, when he did die, the symptoms presented would not at all carry out the supposition of hydrophobia, and the verdict of the coroner's jury was perfectly justified by the facts.

Stretching of the Lower Dental Nerve—Cure.

At a meeting of the *Société de Chirurgie*, Nov. 18th, Mr. Polaillon mentioned the case of a man, 61 years old, who for several years had suffered from neuralgia of the fifth pair, medical treatment having failed in affording relief. Mr. Polaillon performed an elongation of the lower maxillary nerve on the 6th of September. The patient having been anæsthetized, the tissues incised down to the inferior maxillary branch, on a level with the lower dental canal, a small crown of 13 millimeters diameter was used with the trephine, and the nerve having been laid bare it was taken up on a hook, and stretched about 15 millimetres. A Lister dressing was then applied. Three days later there was a slight return of pain, which was controlled by anæsthetics. Since then there has been no relapse.

Special Reports.

No. II.—ON THE EXAMINATION OF DEAD BODIES IN SUPPOSED CRIMINAL CASES.

BY GEO. F. SOUWERS, M.D.

It not unfrequently falls to the lot of the practitioner to be called upon to testify or render an opinion in court, or before a coroner and his jury, in cases where there is more or less of an air of suspicion surrounding the circumstances under which a person has met his death. The physician, in some instances, fortunately, sees the deceased upon whose death inquiry is being made while the individual is yet capable of accounting for the events which resulted in the production of his wounds and bruises, and while he can yet tell his name, age, etc., etc.; but, unfortunately, it at times happens that the doctor does not reach the case until death has stepped in and left to conjecture the cause of the taking off. As coroner's physician, or as an expert, he is called upon to examine the corpse and to render an opinion as to the age, cause and time of death of the body found. Before considering the method of examining a dead body and the

observations to be made and inferences drawn, we will consider the case suggested in the first proposition spoken of above, namely, a man seen who is either in or rapidly approaching articulo mortis. In such a case the doctor should be very careful to weigh carefully every word uttered, not only by the sick man himself, but by every one, even to the youngest child, present; for it may happen that the old adage that "fools and children tell the truth," may receive an exemplification. He should be guardedly jealous of every word of opinion he utters, taking care to express no suspicions to any one, but noting all suspicions expressed by others, for one of two things may transpire from a neglect of these precautions. In the first place, if he unthinkingly utters his suspicions, it may transpire that the suspects may take alarm and escape before the law has an opportunity to lay its hand upon them; or if he is careless about noticing the suspicions of others, it may happen at times that very valuable clues may be lost; and in this connection it is essential that everything transpiring be committed, either *at once* or *as soon after as possible*, to writing, which writing should not be permitted to go out of his possession for a moment, as otherwise it might be tampered with or altogether destroyed, by those who might be compromised.

All statements made by a person grievously wounded or *injured*, where either suicide or the commission of a crime is suspected, as well as in all cases of accidents, as from a person being run over by a railway car, etc., etc., should be, where possible, *immediately* reduced to writing, then read to, and finally signed by the patient, in the presence of witnesses. We suggest that this precaution be taken where injuries are the result of accident, from the fact that not infrequently suit is instituted by the survivors, against corporations and individuals, for having, by their negligence, caused the untoward event to the deceased by which he met his death, whereas the declarations of the person himself may prove beyond peradventure that he was a contributor to his own death, by personal carelessness or risks run; while personal sympathy for the unfortunate surviving relatives, might tend to induce the physician to allow such claims to be made, on the common principle that corporations, etc., should be made to pay for accidents occurring to individuals in the transaction of business, yet he must remember that he stands in the light of a disinterested party; that he, as far as in him lies, must see justice done to each and all, and in prosecution of the duties of his position he is bound to use all reasonable means in his power to assist the law; and a court would be justified in expecting thus much of him. When dying declarations are made, the condition of the one making them should be closely noted; his temperature, nervous condition, mental state, etc., should be noted, in order that, if the question should arise during a trial, as to whether, at the time of the making of certain statements, the deceased was in a rational state; or whether either the attendant or the patient considered that death either was inevitable shortly, or that it was already upon the individual, a reliable answer could be rendered. Any expressions by or actions of the patient indicating that he had no hope of recovery, and that *he was satisfied* that he could by no possibility recover, should be observed by the medical attendant, for certain courts have held, at different times, that for the declarations of a person who shortly afterwards died of the injuries he was then suffering under to have the sanctity and binding force of an oath, they must be made with a feeling or knowledge on his part that he could not by any possibility recover. While this rule has been often set aside or rejected by the judges, in late years, yet no one can tell what question may come up in a criminal trial, or a suit for damages as against corporations, etc., and it is as well to have as *direct* and complete evidence as can possibly be obtained; it has been held that a dying declaration is fully as binding as an oath, from the fact that the awful sense of impending dissolution will so overmaster an individual as to compel him to speak the truth, no matter what revenges, etc., he might personally wish to gratify, or what benefits, as in cases of suicide to obtain an insurance money, he hoped to confer on his family, and which could only be obtained by making false statements, as when in the latter case a provision is in a policy providing against payment of the loss if a person die by his own hand, he should make statements that he had been wounded by others, while we might be supposed to accept the statement as that of a man about to go into the unknown, yet we should remember that there are individuals of such strong force of character that a fear of death would not turn them from a course decided upon to be pursued, and hence, the rule of the old courts would not hold; further, few men, no matter how desperately wounded, give up *all hope* of recovery so long as a spark of clear reason is left them; no matter how demoralized and morally panic stricken they may become in contem-

plation of the extent of the injuries sustained, they in some way, in ninety-nine cases out of a hundred, show that there is yet a lingering hope that all will be well with them. The principle may be summed up in the sentence that "*there must be a conviction of approaching death.** Care must be taken not to ask leading questions of a person under the conditions being considered. A leading question, roughly defined, may be said to be one that can be answered by the reply "yes," or "no;" for instance, to say to a man "It was John Smith who wounded you, was it not?" would be a leading question, for it would almost necessarily have to be answered in one of the two ways mentioned; the reason of this precaution is that a name or person being suggested to a dying individual, might readily be adopted and accused by him, without his hardly being aware of what he was doing, or the vital importance of the question he was replying to; in fact, in this way a person might readily be involved, through the spite and contrivance of others who wished to accomplish ends or revenges of their own. *If a medical attendant is satisfied that his patient will not recover, or that the chances are so decidedly against recovery as to amount almost to a certainty of death, in cases of the nature we are considering, it is his bounden duty to so inform the patient,* for if he does not, we question whether the law should not hold him responsible for such negligence as may result in a miscarriage of justice.

Let us go back and take up the second part of our first proposition, where death has already taken place before the physician's arrival, and starting from the time of entrance upon the premises, follow each step that should be taken in making a medical examination in cases of the kind under discussion. Upon entering, a physician should note carefully the condition and appearance of the surrounding ground or pavement, the steps, door knobs, and jams, and such wood work as might be able to furnish evidence of the manner in which and place at which the person had been wounded. For instance, the following story might be told and receive credence by the unsuspecting physician; that the man had committed suicide in the room in which the body is found; whereas, this story might be the veriest fiction, which could be demonstrated if it had been observed by the doctor that the ground in some locality close to the house had recently been trampled, or that blood spots had been seen on the steps, door knobs, etc., in parts of the house more or less remote from or leading to the place in which the body is found (we are supposing, now, that the person has died of open wounds); for if any of these conditions were found, it would be a fair presumption that the man had not died by his own hand, and in the place stated, but that others must have been concerned in the death of the individual, the blood stains being left by those who were concerned in the person's taking off, and who had carried the body to the place in which it was found by the doctor. The character of these stains and spots should be carefully noted, whether they have a daubed and streaked appearance, or whether they are such as would be caused by blood thrown from the open mouth of an artery; the question of the character of these stains might well be raised in a trial for murder, where the defence was that of suicide; thus a spattered condition of the walls and wood-work of a stair landing only, would of necessity show that an arterial wound had been inflicted before the entrance of the person into the room in which his body is found, and this circumstance might make a very material difference in the acquittal or conviction of a prisoner. Further care should be taken to notice whether the spots or stains have the appearance of freshness, or age, whether they are thoroughly dry, or whether they are still either decidedly wet, or so moist as to be readily rubbed off by a dry body, like the finger or a fine linen rag, for this, again, might be made to bear upon the question of how long a time has elapsed between the exudation of the blood and the finding of the body. If it were still in drops, or readily removable by a slight wipe, it is evident that it could not have been ex corpora for any length of time, or this condition would not prevail. Notice should be taken whether the furniture and hangings of the different apartments are in order, or whether they are disordered and torn; care also being taken to notice whether trunks, secretaries, or other articles likely to contain valuable papers, etc., are open, and having the appearance of having been searched; for a question of this nature might well arise, was there any reason to suspect that the deceased was murdered? either for the purpose of robbery or to secure papers, etc., the possession of which might be of particular interest to the parties suspected of the commission of the crime. In such a case it would be a matter of great interest to know the condition of pieces of furniture, etc., in which such papers would be likely to be kept. Upon approaching the place where the body reposes, care should be taken to narrowly, but

* "Taylor's Medical Jurisprudence," by Hartshorne, page 179.

in no way obtrusively, watch the emotions and behavior of those upon whom suspicion may fall, whether they assist, resist, or in any way attempt to put obstacles in the way of a thorough examination; for all these questions may arise in the course of a criminal trial, and may be used either to the damage or the benefit of accused persons. Before proceeding to examine the body, any instruments, ropes, keys, etc., broken china, or glass ware should be carefully looked for, examined, their condition being noted in writing, and placed in a secure receptacle, which should be retained in the possession of the physician till disposed of, as we shall discuss later.* Where the case has died of poisoning, without a physician having been present previous to death, all vomited matters, bottles, boxes, or papers of powders; whatever excretions, such as urine, etc., that are obtainable; portions of the last meal and drink partaken of by the patient; and any stained pieces of clothing, etc., used by the deceased, should be carefully preserved in air-tight jars (with glass stoppers or covers), sealed and labeled. In regard to food and drink, it is advisable to secure, not only a portion of the common dish from which all are supposed to have been served, but also, when possible, the remnants remaining on the particular plate, or in the cup or glass, of the deceased, for it has not been an unknown thing for a part, and not the whole, of a repast to be criminally prepared, where it is intended to get rid of an individual, and the finding of deleterious matter in one portion and not in another would be evidence of criminal intent on the part of some one.

(To be Continued.)

CORRESPONDENCE.

Some Points in Malarial Fever.

ED. MED. AND SURG. REPORTER:—

One of the most unfortunate terms ever introduced into medical literature is *typho-malarial*; unfortunate, because incorrect. Though it has been discarded by Dr. Woodward, the one who introduced it, the usage of the term is rife in malarious regions. Only a few weeks ago, I remarked to an intelligent practitioner that the malarial fevers of this year are of an unusually intense type. "Yes," he replied, "and there is no doubt they have associated with them a 'typhoid element.'" But, I answered, you do not think the specific typhoid and malarial poisons are conjointly at work in the same individual? He said that he did, and referred me to Dr. Woodward's work, as sustaining such a view. That man knew that Dr. Woodward had formerly enunciated such a belief, but he did not know that he had repudiated it absolutely, in a paper read before the International Medical Congress, at Philadelphia. Typho-malarial fever has no existence. Typhoid fever and malarial fever never exist contemporaneously in the same subject. Too often, in malarious regions, it is found *convenient* to apply the term typho-malarial to grave cases of remittent fever; or a simple malarial fever is said to "turn typhoid" when it assumes a dangerous aspect. It is a disgrace to the medical profession to have such opinions scattered among the people, and when one physician expresses such notions to another, it is difficult to tell whether his knavery or ignorance preponderate.

It should be known that few fevers are more malignant than the ordinary remittent, when improperly treated. It should also be known and remembered, that just as we have pernicious intermittents, so we have pernicious remittents, and that for such a fever to assume grave features or to end fatally it is not necessary to have it *become* either typhoid or typho-malarial. To have typhoid fever *modified* by a malarial element is quite another thing, but it does not become a separate disease. In the same sense do we see scarlet fever or whooping-cough modified by a malarial element.

I have been thus definite with reference to this matter, because the notions that have been refuted are so exceedingly common in malarious regions. Throughout the malarial regions skirting the Susquehanna, the fevers incident thereto have been, during the season just passed, more than usually grave and stubborn. The only variation from the usual course, however, has been the intensity. In spite of the most effective treatment many cases have lasted from two to three weeks. As a rule, the attack would be preceded by a few days during which the patient would be warned of an approaching illness. He would say he felt tolerably well until a certain hour of the morning, it might be, but as the day wore on he would complain of lassitude, of inability to concentrate his energies. There would be more or less headache, with aching in the back and limbs. In a majority of cases the bowels were either constipated or relaxed. Thus on until the malady was fully developed. Sometimes it would be ushered in by a feeling of chilliness, never violent, in my observation. Again, the patient would deny ever having experienced the least coldness.

Upon examination now, the thermometer would record an axillary temperature of from 102° to 104°. There would be headache and backache of moderate intensity. Usually nausea, sometimes not marked for a day or two, but eventually coming on. Occasionally a case of the utmost gravity would run its entire course

* A case in point has just arisen in this city, involving the question of the finding of fragments of broken china. A woman was found dead in a room in a disreputable portion of the city, with certain wounds of the head, which might or might not be the result of a fall. She lived in this room with a negro, and it was in evidence that both partook, more or less freely, of liquor. The claim was that she had fallen to the floor and died; but on the floor the shattered fragments of a pitcher were found, with which it was charged she had been beaten over the head, inflicting mortal injuries. The case, however, has not yet come to trial, but we can see how one circumstance will bear on another.

without vomiting, but never without nausea. Sometimes the tongue would be coated thickly, but more frequently not.

Another marked symptom, and, according to the writer's observation, invariably present, was the gastric uneasiness. I say uneasiness, but it was frequently complained of as the most painful feature of the entire illness. In a majority of the cases under my care the patient would bleed from the nose once or twice during his illness. This feature was never noticed, except in those cases in which constipation was a marked condition. Except in one case, I never was able to discover the slightest moisture of the skin till near the termination of the disease. In fact, perspiration may be regarded as a harbinger of successful issue, and it also denoted the speedy breaking up of the disease.

As to the remissions spoken of in the text-books, and observed in cases of moderate severity, they were not noticeable after the first day or two of the disease. They were marked and regular, however, as the violence of the fever abated. I have been at much pains to ascertain this point. I should have noted the fact that sleeplessness was a prominent feature during the early days of most cases.

If the case did badly, the observer would notice that while, during the early days of the disorder, the whole system seemed to be laboring at high tension, there was now a very considerable depression of the forces, and if proper treatment were delayed, there would be developed a numbness of the extremities, delirium, picking at the bed clothes, extreme restlessness, twitching of the tendons, involuntary relaxation of the sphincters, etc. Many cases in this vicinity have assumed just such features and have terminated fatally.

Diagnosis.—As we believe the mistake most frequently made in the detection of malarial fever to be a confounding of it with typhoid fever, we shall simply discuss briefly the prominent points of difference. No matter what degree of severity may be assumed by malarial fever, we never have the tympanitic abdomen, nor any eruption, as we do in typhoid fever. We may have diarrhœa, though usually the opposite obtains. I met with one case during the past autumn, in which diarrhœa was a very troublesome feature; the patient would have from two to five or six loose actions daily. Again, the thoracic symptoms, so common in typhoid, are absent.

In the temperature record, too, we have valuable data; it is only necessary to remember the peculiarly uniform record of typhoid. In short, the difference is so great that careful practitioners can never err.

Treatment.—It seems to the writer that, at this day, no case of malarial fever, however grave, should terminate fatally. The mistake most commonly made is to purge the patient. I feel justified, by experience, in laying down the statement that a malarial fever patient should never under any circumstances be actively purged. The best results are obtained by letting the bowels entirely alone, save under a circumstance to be mentioned below. I need scarcely state at this day, that the one remedy to be relied upon is one or other of the salts of cinchona. But, above all, allow me to impress the fact that no conservatism should be practiced here. Whichever of the salts of cinchona you use, use it unsparingly and with a fearless hand. If you use sulphate of quinia, give it in from twenty to thirty grain doses, repeated from three to four times in the twenty-four hours. If it is vomited, at once repeat the dose, or administer it hypodermically, or by the rectum. I have learned by the frequent abscesses consequent upon the hypodermic method, to greatly prefer the rectal injections. If the remedy does not seem to be taking proper effect, a one-grain dose of calomel now and then will greatly favor its absorption from the stomach. Quinia so given has a vastly better effect than even the same quantity in divided doses. This can only be a question with those who have had no experience with the treatment by large doses. Now, let us glance cursorily at the diet, and at the treatment of the prominent symptoms. The patient will crave nothing; nothing tastes natural to him; and, as a rule, the best way is to urge no food while the fever rages in its intensity. After this, and during convalescence, allow him anything he may crave and feed him well, beginning, of course, with an easily digestible aliment.

The nausea in most cases will be intense and it is well to attempt relief, though you may try everything and be utterly foiled. Sometimes small doses of calomel (from $\frac{1}{12}$ to $\frac{1}{6}$ gr.), as recommended by Bartholow, will relieve. Warm water will in some cases produce the desired effect. I mention these two plans because they are most effective as a rule, *i. e.*, where anything will do good. The patient will experience great comfort, and not unfrequently great benefit, from bathing, or rather sponging with tepid water, to which has been added a little bay rum. This may be repeated from two to five or six times per day. He should be allowed a moderate amount of liquid, yet not as much as he sometimes craves; in general, the better plan will be to allow him to suck a moderate quantity of ice. Stimulants should not be given early, but upon the yielding of the malady will be found of advantage, according to the exigencies of each particular case. It is occasionally necessary to control the sweating of beginning convalescence, and in no way can this be better done than by a $\frac{1}{4}$ gr. of the ext. of belladonna once or twice a day. Of course, the sweating should not be interfered with, unless the condition or comfort of the patient demand it. The medicines which the writer is in the habit of using during convalescence are either the ferrated elixir of cinchona or Aitken's syrup of the phosphate of iron, quinia and strychnine.

Delta, Pa. J. W. HICKMAN, M.D.

NEWS AND MISCELLANY.

Utilization and Purification of Sewage Water.

On account of the numerous complaints from inhabitants on the banks of the Seine, below Paris, a commission was appointed by the Minister of Agriculture to investigate this subject.

The commission determined: 1st. That some immediate action should be taken to prevent the infection produced by the passage of the sewage

of Paris into the Seine. 2d. That the only system which, up to the present, has proven efficacious and stood the test of time, is the mixture of sewage with earth. 3d. That all excrementitial products should be excluded from the sewage, and then it could be mixed with the earth, on the Peninsula of St. Germain, under the following restrictions: The liquid should be allowed to flow over the land at regular intervals, and, as far as possible, each time the same quantity of sewage. Organic insoluble products should not be allowed to accumulate on the surface of the ground, but should be well worked in with the spade.

A system of drainage would be needed to allow the escape of the irrigating liquid, and chemical analysis of the water of the river below should be made, to determine if the epuration is perfect. The quantity of liquid for irrigating each hectare of ground could be determined later, after a series of chemical analyses.

Finally, it was resolved that a permanent commission of five members ought to be appointed to supervise these works, and see that all the conditions were faithfully fulfilled.

Remarkable Apparatus for Garroting Unsuspecting Physicians.

A new system of garroting has been invented in Berlin, by a most dangerous criminal of the name of Wilke, who, fortunately, is safe in the hands of the police. Recently two men, conscience stricken, presented themselves before the authorities, accusing themselves of having conspired with a locksmith (the man Wilke), to hire furnished rooms in different parts of the town, for the purpose of extorting money, in the following manner. One of them was to go to bed, pretending to be ill, and send for a doctor. As soon as the physician arrived and bent over the bed, an iron collar of a special contrivance, hid beneath the counterpane, was to be applied to his neck until he had signed a bill of exchange; then he was to be strangled and thrown into a canal which was close at hand. Wilke had devoted much ingenuity to the construction of this instrument, which they described as something like a pair of tongs or pincers fixed on the end of a long iron tube, with a winch at the bottom, by means of which the tongs could be made to close as tight as one liked. The peculiar virtue of this nefarious invention was to consist in preventing the victim from crying for help by immediately depriving him of the power of utterance. To make matters still surer, Wilke had also constructed two steel traps for the victim's feet. The conspirators had begun by hiring a room at No. 59 Elizabeth-Ufer, where the Schiffahrts-Kanal has an unusual width, and would facilitate the disposal of dead bodies. That very evening, the penitent accomplices declared, had been agreed upon for committing the first murder, and Dr. Lehrs, living close by, on the Kaiser-Franz Grœdier Platz, was selected as the first victim.

As soon as this confession had been made, policemen were sent to the house mentioned, where they were told that a man who pretended to be employed in the Government Office for Weights and Measures had, a few days ago, hired a room and paid a fortnight's rent in advance, but that he had not shown himself since; he had, however, sent a trunk into his room the day before. The directory having been referred to, and showing that no person of the name of Wilke was employed in the office in question, the constables proceeded to open the trunk, in which they found two man-traps and all the component parts of the garroting machine. The trunk was carefully reclosed, and the landlady warned not to say a word about the visit. An agreement was then come to between the police and Wilke's two accomplices, that the latter should at first assist their comrade in carrying out his diabolical plan, and only turn round upon him when the victim's life was in danger. Several constables were concealed in a neighboring room, and at seven Wilke appeared, entered his bed-room with his confederates, went to bed, and sent for Dr. Lehrs. Instead of the latter, a policeman came in disguise, and inquired after Wilke's health. The ruffian at once sprang up and applied his pincers to the pseudo physician's neck. The latter, having managed to make Wilke understand that he had very little money about him, he was requested to fill up a check. On his refusal, Wilke turned the winch, until the victim began to be afraid for his life, and began stamping on the ground. This was the signal for the accomplices to let the constables' hands loose, and for the police to enter and seize the criminal in the very act.

The Coming Sanitary Exhibition in Berlin.

An exhibition of books, models and drawings relating to hygiene and safety appliances will be held in Berlin from June to October next, in which American inventors, scientific and industrial men, institutes, boards, etc., interested in sanitary enginery, are solicited to participate. Inventions and machinery for cleaning streets, providing towns with water, lighting, public baths, plans of tenement houses, factories, heating and ventilating systems, food products, steam, horse and electric railroads and kindred appliances will be largely displayed. In addition to these, plans for life-saving by fire, protection against lightning, inundations, explosions, mine accidents, and art works and pencilings will be included. The exhibition is managed by a chief committee, composed of a number of prominent practical and scientific men and able officers, under the presidency of the Staatsminister, Dr. Hobrecht. They are assisted by special committees in all larger towns of Germany, Austria and Switzerland, consisting of the leaders in the different departments of sanitary engineering. Dr. Bruno Terne, of No. 20 South Delaware avenue, is in possession of the plans and details of the exhibition.

Dead and Missing for 1881.

The death-roll of the Coroner of Philadelphia for 1881, embracing a list of 1915 cases, shows that 108 persons died during the year without leaving a single clue to establish their identity. Of this number 67 were infants abandoned at birth; 38 of the

unknown were men and 3 were women. Twenty-seven bodies were found floating in the river, the greater portion of whom were suicides, and five men were run over by the cars. The records of the Police Department disclose 195 cases reported as missing or having run away, 45 of whom were afterwards found. Fully one-half of this number were boys and girls who, having drunk in the inspiration derived from reading dime novels and other productions of that character, ran away from home to seek fame and fortune.

A Fatal Disease Contracted from a Horse.

A curious suit for damages has been brought against the Hestonville, Mantua and Fairmount Passenger Railway Company, by Widow Mary Loughrey. Michael Loughrey, who was Mrs. Loughrey's husband, was employed as a driver by the company, early in 1880. The horses attached to his car, it is alleged, were afflicted with glanders. Michael contracted the disease. Dr. D. Hayes Agnew and other eminent physicians were called in, but they could not control the malady. Loughrey suffered intensely for about six weeks, when he died. Mrs. Loughrey claims that the company was legally obliged to employ horses of sound health. She claims $20,000 damages for her husband's life, sacrificed, as she charges, through the company's neglect.

Items.

—*Braithwaite's Retrospect* for December, 1881, quotes the MEDICAL AND SURGICAL REPORTER fifty-four times.

—The female wards of the Norristown Insane Hospital are under the charge of a female physician. Since the County Medical Society have decided to admit women to membership, it seems perfectly proper that they should be given an opportunity to demonstrate their capacity for public professional positions of trust. Furthermore, this lady physician is said to have been very successful in her moral treatment of those under her care, and to have acquired wonderful influence over them.

OBITUARY NOTICES.

—Dr. William E. Butler, a staff officer of General Jackson in the war of 1812, died at Jackson, Tenn., a few days ago, aged ninety-two years. Once he was defeated by Davy Crockett for the Tennessee Legislature. He owed his defeat to the fact that he had carpet on his floor. Crockett proclaimed from the stump: "Why, my fellow citizens, my aristocratic and wealthy competitor walks every day on store goods finer than any of your wives or daughters ever wore."

—Dr. Orlando Fairfax was found dead in his bed on the morning of January 11th, 1882, in Richmond, Va., where he had resided since 1861. Born in Alexandria, Va.; he was a graduate of the Universities of Virginia and Pennsylvania. He was member of the younger branch of Lord Fairfax's family, and was 76 years old at the time of his death.

—Dr. George W. Pape, of Baltimore, son of the well known German physician, Dr. G. Edward Pape, committed suicide on January 8th, by taking morphine. The young man had suffered from malaria for two years, in consequence of which he was very much depressed in spirits, and in a fit of utter despondency he committed the deed.

QUERIES AND REPLIES.

ED. MED. AND SURG. REPORTER:—

Dear Sir: Will you be kind enough to send me a formula for a good *embalming* injection, and state about the portion necessary for *one body*. Is chloride of zinc or arsenious acid the best? Please favor me with an answer and greatly oblige. W. N. SHERMAN.

Answer.—Prof. Leidy, of the University of Pennsylvania, informs us that the neutral chloride of zinc, as prepared by Powers and Weightman, is the best injecting material. About two quarts, with half that quantity of water, will usually suffice for a body, but Professor Leidy adds, to inject as much as the vessels will contain. Arsenic makes the body look more natural, but will not preserve it so long. The chloride of zinc, as given, is what they use in the University to preserve and keep bodies through the summer.

MARRIAGES.

HERITAGE—CLARK.—On January 6th, 1882, at the M. E. Parsonage, Mantua, N. J., by Rev. W. Williams Christine, Paul S. Heritage, M.D., of Mantua, and Miss Emma M. Clark, of Wenonah.

KRISE—BEETEM.—On Tuesday evening, October 4th, 1881, in the English Lutheran church of Carlisle, by Rev. C. S. Albert, assisted by Rev. A. H. Kremer, D.D., C. Worth Krise, M.D., and Miss Emma F. Beetem, both of Carlisle.

LEWIS—COOPER.—December 29th, 1881, at the residence of the bride's parents, by the Rev. Robert Edwards, Joseph Cresswell Lewis, M.D., of Frankford, Philadelphia, and Miss Eliza Campion, daughter of William Penn Cooper, Esq.

LOGAN—OLMSTEAD.—In Scranton, Pa., in the First Presbyterian Church, December 29th, 1881, by the Rev. S. C. Logan, Harry V. Logan, M.D., eldest son of the officiating clergyman, and Mary M., only daughter of Richard W. Olmstead, Esq., of Scranton.

RANKIN—McCLELLAND.—November 29th, 1881, by Rev. William M. Taylor, Dr. J. M. Rankin, of Richland, Kalamooza county, Michigan, and Miss Martha A. McClelland, of Mount Jackson, Lawrence county, Pa.

STARR—BROWN.—In New York, on Monday, December 26th, 1881, at the East Baptist Church, by the Rev. H. G. Mason, Dr. Alfred R. Starr and Miss Lizzie L. Brown.

TAYLOR—PAUL.—At the residence of S J. Paul, December 1st, 1881, by Rev. J. L. Thompson, assisted by Rev. J. M. Jones and Rev. S. M. Good, Dr. A O. Taylor and Miss Maggie J. Paul, all of Delmont, Westmoreland county, Pa.

TORBERT—COOK.—January 6th, 1882, at the residence of the bride's parents, by Rev. P. H. Mowry, Dr. E. G. Torbert, of Driftwood, Pa., and Kate S. Cook, daughter of Jesse Cook, of Philadelphia.

DEATHS.

HASBROUCK.—In New York, on Wednesday, December 28th, 1881, Stephen Hasbrouck, M.D., in the 88th year of his age.

KNOWLES.—At Clifton, Delaware county, on December 26th, 1881, Henry B. Knowles, M.D., aged 22 years.

SHEARER.—At Dillsburg, Pa., December 14th, 1881, James M. Shearer, M.D., in the 48th year of his age.